

REVIEWS.



London.

Young Man's Companion.
OR
YOUTH'S INSTRUCTOR.)



LONDON: GEO. ALLEN & CO. 36, BRYAN ST.

THE
YOUNG MAN'S COMPANION

YOUTH'S INSTRUCTOR.

BEING A GUIDE TO THE
VARIOUS BRANCHES OF USEFUL KNOWLEDGE,

TO WHICH IS PREFIXED,

An Introductory Address on the Advantages of Education.

BY J. MAVOR, F. A. S.

EMBELLISHED WITH APPROPRIATE ENGRAVINGS.

8

LONDON:

GEORGE VIRTUE, 26, IVY LANE, ST. PAUL'S.

1836

PREFACE

TO THE

NEW EDITION

IN presenting to the public a New Edition of the Young Man's Companion, the Editor is desirous of expressing his grateful sense of the liberal patronage afforded to former editions, while he embraces this opportunity to explain the motives which induce him to undertake the present one. As all human labours are attended with imperfection, the Editor has availed himself of the remarks of judicious friends, as well as his own observations on former editions, in order to make the work as perfect as possible; and in pursuance of this object some portions of the matter have been abridged, while others have been considerably enlarged.

• The Editor begs leave to recommend to the attention of the youthful reader the Introductory Address on the Advantages of Education, which is prefixed to the present edition, as calculated to excite in his mind a high sense of the value of useful knowledge, and an ardent desire of improving every opportunity for its increase. In the following work, English Grammar, Arithmetic, Geography, Astronomy, Natural Philosophy, History, &c. are discussed at a considerable length. To these are

P •

PREFACE.

added, a Section on Amusements and Recreations, and some interesting detached pieces of a miscellaneous kind; as Gardening Management of Bees &c.: in the latter subject many interesting recent discoveries are now introduced. And as it is a common observation, that those of our youth who are not actively engaged in the pursuits of husbandry, exhibit an almost total ignorance of the most simple operations of the field, by which our daily wants are supplied, a chapter is introduced containing a short history of the origin and progress of agricultural pursuits, with a sketch of the principles on which some of the most important branches are conducted, as Sowing, Reaping, Haymaking, &c. accompanied by elegant illustrative Engravings.

The Editor will only add in conclusion, that as the great end of man's existence is to attain a state of preparation for higher occupations and enjoyments than those of this world, he strongly recommends to his readers an attentive perusal of the Chapter on Religion, containing a brief but perspicuous view of its evidences, doctrines, and precepts; for he is confident that it will be found upon the closest investigation, that the precepts of Christianity are the only safe guide in the path of life, and its doctrines the only ground of "sure and certain hope" in the hour of death.

INTRODUCTORY ADDRESS

ON THE

ADVANTAGES OF EDUCATION.

IN order to form some idea of the advantages of Education, it will be necessary briefly to trace its progress and its influence on the character of mankind from the earliest period. In the infancy of society, little attention could be paid to the education of youth. Before men emerged from a savage state, they were the creatures of appetite and instinct. The young savage owes his education rather to nature, and the circumstances in which he is placed, and the accidents which befall him, than to the kindness or prudence of his parents. But man was not designed by his wise and beneficent Creator to remain long in a savage state: the principles of his nature incline him to social life; and in an improved state of society, which mutual intercourse gradually produces, the education of youth is viewed as an object of the greatest importance.

We may trace the advantages of education in the improvement which by its influence gradually took place in several of the most celebrated governments of antiquity. Till the age of sixteen or seventeen, the Persian youth were employed in learning justice, temperance, and modesty; and to manage dexterously the bow and the javelin. They then ceased to be considered as boys, and were raised to the order of the youths. After they entered this order, they were to attend the magistrates, and to be always ready to execute their commands. They were led out frequently to the chase; and on such expeditions they were always headed by the king, as in time of war. After spending ten years in this manner, their course of education was completed; they were admitted into the class of the adults, and were esteemed qualified for public offices. The Cretans, whose laws are celebrated in the records of antiquity, had also a public esta-

blishment, founded by Minos, for the education of their youth. Its general plan and tendency was similar to that of the Persians—to form the soldier and the citizen.

Lycurgus, the celebrated lawgiver of Lacedæmon, regarded children as belonging more properly to the state than to their parents, and wished that patriotism should be still more carefully cherished in their breasts than filial affection. At the age of seven the boys were introduced to a public class, where their education was committed to masters appointed by the state. The principal fault in the education of the Lacedæmonian youth was, that they were not only permitted, but directed, to commit little acts of theft ; which, if they performed them so dexterously as to avoid detection, they might afterwards boast of as noble exploits ; but if detected in such enterprises, the awkward artless boy was exposed both to punishment and disgrace. It is related of one of them, that rather than be detected with a young fox under his cloak, which he had stolen, he suffered the little animal to tear open his bowels.

But as the manners of mankind gradually improved to a state of refinement, connubial, parental, and filial affection acquired greater strength and tenderness. Children experienced more of their parents' care ; and that care was directed to form them for acting a becoming part in life. According to the circumstances of each nation, the arts which they cultivated, and the form of government under which they lived, the knowledge which they sought to communicate to their children, and the habits to which they endeavoured to form them, were different from those of other nations. And in the present age, distinguished as it is by the combined influence of advanced civilization and the precepts of Christianity, our grand object should be to promote the happiness of the individual, and to render him an honourable and useful member of society, by teaching him not only to aim at a regular discharge of his social duties, and a strict adherence to the moral virtues, but by inculcating what is of still greater importance, the duty he owes to his Creator, and the necessity of preparing for a future state.

As soon as a youth has acquired a tolerable facility in reading, he should be instructed in the first principles of Grammar, at first rather as an amusement than a task, teaching him only to name and distinguish the different parts of speech. When perfect in this, so as to parse a sentence with ease, he should be taught the rules of syntax, and the

principles on which sentences are constructed. These exercises, while they call forth the powers of the understanding, will also induce habits of steady attention, as well as nice discrimination, and will prove an admirable preparation for the study of other languages. To acquire the art of Writing with ease and quickness, is also a requisite to the proper pursuit of any of the branches of education; and next to this, the pupil should be taught the art of numeration and notation. Arithmetic affords more exercise to the reasoning powers than any other of those branches of learning to which we apply in our earlier years; and if the youth's attention be directed to it at a proper period, and care be taken to make him comprehend fully the principles upon which each particular operation proceeds, it will contribute much to increase the strength and the acuteness of the powers of his understanding. The attention of the pupil may next be directed to the amusing study of Geography, which is highly valuable as an auxiliary to the study of history, as well as a suitable vehicle for a variety of useful information. Intimately connected with this is the science of Astronomy, which, while it excites the curiosity and eager inquiries of the youthful mind, has a powerful tendency to fill it with enlarged and exalted ideas of the works of creation, as well as the power, goodness, and wisdom of the great Creator. Natural History will also afford much useful instruction in an entertaining and attractive form. Botany is peculiarly worthy the notice of youth. It has a highly beneficial influence in quickening the discriminating powers, and a direct tendency to excite, as well as to gratify, a taste for beauty and ingenuity of contrivance.

A still more important study is that of History. It exhibits the characters of men in all possible circumstances, with all their passions, propensities, and faculties; and while the pupil traces the almost boundless variety of sentiments and modes of action which prevail in different communities, his views of society are enlarged. And though the history of his own country ought to be the most interesting to every student, and to claim his first attention, yet he should not confine himself to this; for by the study of the history of all countries, he is gradually led to banish from his mind those prejudices which the love of his country, however amiable in itself, too often excites against those who dwell in other climes and under different governments. Such are a few of the most important studies, the rudiments of which

it has been our aim to comprehend in the present work. Where opportunity is offered for enlarging the sphere of instruction, other works of greater extent must be consulted.

To conclude ; without the influence of education, all the blessings which civilization, the arts and sciences, philosophy, and, above all, Christianity, confer on man, seem entirely lost. "He who in his youth," says Mr. Dodsley, "improves his intellectual powers in the pursuit of useful knowledge, and refines and strengthens his mind by the love of virtue and religion, for the service of his friends, his country, and mankind ; who is animated by true glory, exalted by pure friendship for social, and softened by virtuous love for domestic life ; who to all these adds a sober and masculine piety, equally remote from superstition and enthusiasm ; that man enjoys the most agreeable youth, and accumulates the richest fund for the happy enjoyment of his maturer years. He who in manhood keeps his passions and his imagination under due control ; who forms the most select and virtuous friendship ; who pursues fame, wealth, and power, only in the road of honour ; who in his private conduct gives fullest scope to the tender and manly affections, and in his public character serves his country in the most upright and disinterested manner ; who enjoys the goods of life with the greatest moderation, bears its ills with becoming fortitude, and in the various circumstances of duty and trial maintains and expresses an habitual reverence and love of God ; that man is the worthiest character in the stage of life, passes through it with the highest satisfaction and dignity, and paves the way to the most easy and honourable old age. Finally, he who in the decline of life preserves himself most free from the chagrin incident to that period, cherishes the kindest and most equal affections, uses his experience and authority in the most tender and judicious manner, acts under a sense of the inspection, and with a view to the approbation of his Maker, is daily aspiring after immortality, and ripening fast for its joy ; and having sustained his part with consistency to the closing scene of life, quits the stage with modest and graceful dignity. This is the best, the wisest, and the happiest old man."

ENGLISH GRAMMAR.

ENGLISH GRAMMAR is the art of speaking and writing the English language with propriety.

It is divided into four parts, namely, **ORTHOGRAPHY**, **ETYMOLOGY**, **SYNTAX**, and **PROSODY**.

ORTHOGRAPHY.

Letters.

ORTHOGRAPHY teaches the nature and powers of letters, and the just method of spelling words.

The letters of the English language, called the English Alphabet, are twenty-six in number, as follow.

ROMAN CHARACTERS.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z.

a b c d e f g h i j k l m n o p q r s t u v w x y z.

ITALIC.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z.

a b c d e f g h i j k l m n o p q r s t u v w x y z.

SOUND OF EACH LETTER.

di, bee, see, dee, cc, ef, jee, aitch, eye, jay, kay, el, em, en, o, pee, que, ar, ess, tee, you, vee, double-u, eks, wy, zed.

Letters are divided into vowels and consonants.

The vowels are, *a, e, i, o, u*; and sometimes *w* and *y*.

W and *y* are consonants when they begin a word or syllable; but in every other situation they are vowels.

Four of the consonants, namely, *l, m, n, r*, are *liquids*, from their readily uniting with other consonants, and flowing as it were into their sounds.

A diphthong is the union of two vowels; as, *ea* in *beat*, *ou* in *sound*.

A triphthong, the union of three vowels; as, *eau* in *beau*, *iew* in *view*

Syllables.

A syllable is a sound, either simple or compounded, pronounced by a single impulse of the voice, and constituting a word, or part of a word; as, *a*, *an*, *ant*.

Spelling is the art of rightly dividing words into their syllables, or of expressing a word by its proper letters.

Words.

A word of one syllable is a monosyllable; of two, a dissyllable; of three, a trisyllable; of four or more, a polysyllable.

All words are either primitive, or derivative.

A primitive word is that which cannot be reduced to any simpler word in the language; as, *man*, *good*, *content*, *York*.

A derivative word is that which may be reduced to another word in English of greater simplicity; as, *manly*, *goodness*, *contentment*, *Yorkshire*.

ETYMOLOGY.

The second part of grammar is Etymology; which treats of the different sorts of words, their various modifications, and their derivation.

There are in English nine sorts of words, or, as they are commonly called. Parts of Speech; namely, the ARTICLE, the SUBSTANTIVE OR NOUN, the ADJECTIVE, the PRONOUN, the VERB, the ADVERB, the PREPOSITION, the CONJUNCTION, and the INTERJECTION.

1. An Article is a word prefixed to substantives, to point them out, and to show how far their signification extends; as, *a* garden, *an* eagle, *the* woman.

2. A Substantive or Noun is the name of any thing that exists, or of which we have any notion; as, *London*, *man*, *virtue*.

A substantive may, in general, be distinguished by its taking an article before it, or by its making sense of itself; as, *a book*, *the sun*, *an apple*; *temperance*, *industry*, *chastity*.

3. An Adjective is a word added to a substantive, to express its quality ; as, an *industrious* man, a *virtuous* woman.

An adjective may be known by its making sense with the addition of the word *thing* ; as, a *good* thing, a *bad* thing : or of any particular substantive ; as, a *sweet* apple, *pleasant* prospect.

4. A Pronoun is a word used instead of a noun, to avoid the too frequent repetition of the same word ; as, the man is happy, *he* is benevolent, *he* is useful.

5. A Verb is a word which signifies *to be*, *to do*, or *to suffer* ; as, *I am*, *I rule*, *I am ruled*.

A verb may generally be distinguished by its making sense with any of the personal pronouns, or the word *to*, before it ; as, *I walk*, he *plays*, they *write* ; or, *to walk*, *to play*, *to write*.

6. An Adverb is a part of speech joined to a verb, an adjective, and sometimes to another verb, to express some quality or circumstance respecting it ; as, he reads *well* ; a *truly* good man ; he writes *very correctly*.

An adverb may be generally known by its answering to the question, how ? how much ? when ? or where ? as, in the phrase she reads *correctly*, the answer to the question, how does she read ? is, *correctly*.

7. Prepositions serve to connect words with one another, and to show the relation between them ; as, he went *from* London *to* York ; she is *above* disguise ; they are supported *by* industry.

A preposition may be known by its admitting after it a personal pronoun in the objective case ; as, *with*, *for*, *to*, &c. will allow the objective case after them ; with *him*, for *her*, to *them*, &c.

8. A Conjunction is a part of speech that is chiefly used to connect sentences, so as out of two or more sentences to make but one ; it sometimes connects only words ; as, thou *and* he are happy, *because* you are good ; two *and* three are five.

9. Interjections are words thrown in between the parts of a sentence, to express the passions or emotions of the speaker ; as, *O* virtue, how amiable thou art !

ARTICLE.

An Article is a word prefixed to substantives, to point them out, and to show how far their signification extends ; as, *a* garden, *an* eagle, *the* woman.

In English there are but two articles, *a* and *the*; *a* becomes *an* before a vowel, and before a silent *h*; as, *an* acorn, *an* hour. But if the *h* be sounded, the *a* only is to be used; as, *a* hand, *a* heart, *a* highway.

A or *an* is styled the indefinite article: it is used in a vague sense, to point out one single thing of the kind, in other respects indeterminate; as, give me *a* book; bring me *an* apple.

The is called the definite article, because it ascertains what particular thing or things are meant; as, give me *the* book; bring me *the* apples; meaning some particular book or apples referred to.

A substantive without any article to limit it, is generally taken in its widest sense; as, a candid temper is proper for man; that is, for all mankind.

SUBSTANTIVE.

A Substantive or Noun is the name of any thing that exists, or of which we have any notion; as, *London*, *man*, *virtue*.

Substantives are either proper or common.

Proper names or substantives are the names appropriated to individuals; as, *George*, *Charlotte*, *London*, *Thames*.

Common names or substantives stand for kinds containing many sorts, or for sorts containing many individuals under them; as *animal*, *man*, *tree*, &c.

To substantives belong *gender*, *number*, and *case*.

Gender.

Gender is the distinction of nouns with regard to sex. There are three genders, the *masculine*, the *feminine*, and the *neuter*.

The masculine gender denotes animals of the male kind; as, a *man*, a *horse*, a *bull*.

The feminine gender signifies animals of the female kind; as, a *woman*, a *duck*, a *hen*.

The neuter gender denotes objects which are neither males nor females; as, a *field*, a *house*, a *garden*.

Some substantives naturally neuter are, by a figure of speech, converted into the masculine or feminine gender; as, when we say of the sun, *he* is setting, and of a ship, *she* sails well, &c.

The English language has three methods of distinguishing the sex, namely:

1. By different words ; as,

MALE.	FEMALE.	MALE.	FEMALE.
Bachelor,	Maid.	Husband,	Wife.
Boy,	Girl.	Lad,	Lass.

2. By a difference of termination ; as,

MALE.	FEMALE.	MALE.	FEMALE.
Actor,	Actress.	Lion,	Lioness.
Bridegroom,	Bride.	Poet,	Poetess.

3. By a noun, pronoun, or adjective, being prefixed to the substantive ; as,

MALE.	FEMALE.
A cock-sparrow,	A hen-sparrow.
A man-servant,	A maid-servant.

Number.

Number is the consideration of an object as one or more. Substantives are of two numbers, the singular and the plural.

The singular number expresses but one object ; as, a *chair*, a *table*, a *box*, a *wife*.

The plural number signifies more objects than one ; as, *chairs*, *tables*, *boxes*, *wives*.

Some nouns, from the nature of the things which they express, are used only in the singular ; others only in the plural form : as, *wheat*, *pitch*, *gold*, *sloth*, *pride*, &c. ; and *bellows*, *scissars*, *lungs*, *riches*, &c.

Some words are the same in both numbers ; as, *deer*, *sheep*, *swine*, &c.

Case.

English substantives have three cases, the nominative, the possessive, and the objective.

The nominative case simply expresses the name of a thing, or the subject of the verb ; as, the *boy* plays, the *girls* learn.

The possessive case expresses the relation of property or possession, and has an apostrophe, with the letter *s* coming after it ; as, the *scholar's* duty ; my *father's* house.

When the plural ends in *s* the other *s* is omitted, but the apostrophe is retained ; as, on *eagles'* wings, the *drapers'* company.

Sometimes also, when the singular terminates in *s*, the apostrophic *s* is not added ; as, for *goodness*' sake : for *righteousness*' sake.

The objective case expresses the object of an action, or of a relation ; and generally follows a verb active, or a preposition ; as, John assists *Charles*, they live in *London*.

English substantives are declined in the following manner :

	SINGULAR.	PLURAL.
<i>Nominative case.</i>	A mother.	Mothers.
<i>Possessive case.</i>	A mother's.	Mothers'.
<i>Objective case.</i>	A mother.	Mothers.
<i>Nominative case.</i>	The man.	The men.
<i>Possessive case.</i>	The man's.	The men's.
<i>Objective case.</i>	The man.	The men.

ADJECTIVE.

An Adjective is a word added to a substantive, to express its quality ; as, an *industrious* man ; a *virtuous* woman, a *benecolent* mind.

In English the adjective is not varied on account of gender, number, or case. Thus we say, a *careless* boy, *careless* girls.

The only variation which it admits is that of the degrees of comparison.

There are commonly reckoned three degrees of comparison ; the *positive*, *comparative*, and *superlative*.

The positive state expresses the quality of an object, without any increase or diminution ; as, *good*, *wise*, *great*.

The comparative degree increases the positive in signification ; as, *better*, *wiser*, *greater*.

The superlative degree increases the positive to the highest degree ; as, *best*, *wisest*, *greatest*.

PRONOUN.

A Pronoun is a word used instead of a noun, to avoid the too frequent repetition of the same word ; as, the man is happy, *he* is benevolent, *he* is useful.

There are three kinds of pronouns, namely, the *personal*, the *relative*, and the *adjective pronouns*.

Personal Pronouns.

There are five personal pronouns ; namely, *I*, *thou*, *he*, *it* ; with their plurals, *we*, *ye* or *you*, *they*.

Personal pronouns admit of person, number, gender, and case.

The persons of pronouns are three in each of the numbers, namely :

<i>I</i> , is the first person	} Singular.
<i>Thou</i> , is the second person .	
<i>He, she, or it</i> , is the third person	
<i>We</i> , is the first person	} Plural.
<i>Ye, or you</i> , is the second person	
<i>They</i> , is the third person .	

The number of pronouns, like those of substantives, are two, the singular and the plural; as, *I, thou, he; we, ye, they*.

Gender has respect only to the third person singular of the pronouns, *he, she, it*. *He* is masculine; *she* is feminine; *it* is neuter.

Pronouns have three cases; the nominative, the possessive, and the objective.

The objective case of a pronoun has, in general, a form different from that of the nominative or the possessive case.

The personal pronouns are thus declined :

PERSON.	CASE.	SINGULAR.	PLURAL
<i>First.</i>	<i>Nom.</i>	<i>I.</i>	<i>We.</i>
	<i>Possess.</i>	<i>Mine.</i>	<i>Ours.</i>
	<i>Obj.</i>	<i>Me.</i>	<i>Us.</i>
<i>Second.</i>	<i>Nom.</i>	<i>Thou.</i>	<i>Ye or you.</i>
	<i>Possess.</i>	<i>Thine.</i>	<i>Yours.</i>
	<i>Obj.</i>	<i>Thee.</i>	<i>You.</i>
<i>Third.</i>	<i>Nom.</i>	<i>He.</i>	<i>They.</i>
	<i>Possess.</i>	<i>His.</i>	<i>Theirs.</i>
	<i>Obj.</i>	<i>Him.</i>	<i>Them.</i>
<i>Third.</i>	<i>Nom.</i>	<i>She.</i>	<i>They.</i>
	<i>Possess.</i>	<i>Hers.</i>	<i>Theirs.</i>
	<i>Obj.</i>	<i>Her.</i>	<i>Them.</i>
<i>Third.</i>	<i>Nom.</i>	<i>It.</i>	<i>They.</i>
	<i>Possess.</i>	<i>Its.</i>	<i>Theirs.</i>
<i>Neuter.</i>	<i>Obj.</i>	<i>It.</i>	<i>Them.</i>

Relative Pronouns.

Relative pronouns are such as relate in general to some word or phrase going before, which is thence called the

antecedent : they are, *who*, *which*, and *that* ; as, the man is nappy *who* lives virtuously.

What is a kind of compound relative, including both the antecedent and the relative, and is equivalent to *that which* ; as, this is *what* I wanted ; that is to say, *the thing which* I wanted.

Who is applied to persons, *which* to animals and inanimate things ; as, he is a friend *who* is faithful in adversity ; the bird *which* sung so sweetly is flown ; this is the tree *which* produces no fruit.

That, as a relative, is often used to prevent the too frequent repetition of *who* and *which*. It is applied to both persons and things ; as, he *that* acts wisely deserves praise ; modesty is a quality *that* highly adorns a woman.

Who is of both numbers, and is thus declined :

SINGULAR AND PLURAL.

Nominative.	Who.
Possessive.	Whose.
Objective.	Whom.

Who, *which*, *what*, are called *interrogatives* when they are used in asking questions ; as, *who* is he ? *which* is the book ? *what* are you doing ?

Adjective Pronouns

Adjective pronouns are of a mixed nature, participating the properties both of pronouns and adjectives.

The adjective pronouns may be subdivided into four sorts, namely, the *possessive*, the *distributive*, the *demonstrative*, and the *indefinite*.

1. The *possessive* are those which relate to possession or property. There are seven of them ; namely, *my*, *thy*, *his*, *her*, *our*, *your*, *their*.

2. The *distributive* are those which denote the persons or things that make up a number, as taken separately and singly ; they are, *each*, *every*, *either* ; as, *each* of his brothers is in a favourable situation ; *every* man must account for himself ; I have not seen *either* of them.

3. The *demonstrative* are those which precisely point out the subjects to which they relate : *this* and *that*, *these* and *those*, are of this class ; as, *this* is true charity, *that* is only its image.

This refers to the nearest person or thing, and *that* to the more distant ; as, *this* man is more intelligent than *that*

This indicates the latter, or last mentioned ; *that* the former, or first mentioned ; as, wealth and poverty are both temptations ; *that* tends to excite pride, *this* discontent.

4. The *indefinite* are those which express their subjects in an indefinite or general manner. The following are of this kind ; *some, other, any, one, all, such, &c.*

VERB.

A Verb is a word which signifies *to be, to do, or to suffer* ; as, I *am, I rule, I am ruled.*

Verbs are of three kinds ; *active, passive, and neuter.*

A verb active expresses an action, and necessarily implies an agent, and an object acted upon : as, *to love* ; I *love* Henry.

A verb passive expresses a passion or a suffering, or the receiving of an action ; and necessarily implies an object acted upon, and an agent by which it is acted upon ; as, *to be loved* ; Henry *is loved* by me.

A verb neuter expresses neither action nor passion, but being, or a state of being ; as, I *am, I sleep, I sit.*

To verbs belong number, *person, mood, and tense*

Number and Person.

Verbs have two numbers, the singular and the plural ; as, I *love, we love.*

In each number there are three persons ; as,

	SINGULAR.	PLURAL.
<i>First person.</i>	I love.	We love.
<i>Second person.</i>	Thou lovest.	Ye love.
<i>Third person.</i>	He loves.	They love.

Mood.

Mood or mode is a particular form of the verb, showing the manner in which the being, action, or passion, is represented.

There are five moods of verbs, the *indicative*, the *imperative*, the *potential*, the *subjunctive*, and the *infinitive*.

The indicative mood simply indicates or declares a thing : as, he *loves* ; he *is loved* : or it asks a question : as, does he *love* ?

The imperative mood is used for commanding, exhorting,

entreating, or permitting ; as, *depart* thou ; *mind* ye ; *let* us *stay* ; *go* in peace.

The potential mood implies possibility, or liberty, power, will, or obligation ; as, it *may* rain ; he *may* go or stay ; I *can* ride ; he *would* walk ; they *should* learn.

The subjunctive mood represents a thing under a condition, motive, wish, supposition, &c. ; and is preceded by a conjunction, expressed or understood, and attended by another verb ; as, I will respect him, though he *chide* me ; *were* he good, he would be happy ; that is, *if* he *were* good.

The infinitive mood expresses a thing in a general and unlimited manner, without any distinction of number or person ; as, *to act*, *to speak*, *to be feared*.

The *Participle* is a certain form of the verb, and derives its name from its participating, not only the properties of a verb, but also those of an adjective ; as, I am desirous of *knowing* him ; *admired* and *applauded*, he became vain ; *having finished* his work, he submitted it, &c.

There are three participles ; as, *loving*, *loved*, *having loved*.

Tense.

Tense being the distinction of time, seems to admit only of the present, past, and future ; but some grammarians, to mark it more accurately, make it to consist of six variations ; it will be sufficient, however, to consider it only in three points of view.

The present tense represents an action or event as passing at the time in which it is mentioned ; as, I *rule*, I *am ruled*, I *think*, I *fear*.

The past tense represents the action or event as having taken place ; as, I *did rule*, I *was ruled*, I *thought*, I *feared*.

The future tense represents the action as yet to come, either with or without respect to the precise time when ; as, the sun *will* rise to-morrow ; I *shall* see them again.

The conjugation of a verb is the regular combination and arrangement of its several numbers, persons, moods, and tenses.

The conjugation of the verbs at large would only be perplexing and tedious to the young beginner, and has, no doubt, often proved a great barrier to the progress of grammatical knowledge. The verb *to love* only, therefore, is here introduced as a specimen, to give the learner a general

idea of it, and to show the utility of this branch of grammar. Other verbs may be conjugated as inclination and opportunity may serve.

An active verb is conjugated in the following manner :

TO LOVE.

INDICATIVE MOOD.

Present Tense.

PERSON. SINGULAR.

1. I love,
2. Thou lovest,
3. He, she, *or* it loveth *or* loves.

PERSON. PLURAL.

1. We love.
2. Ye *or* you love.
3. They love.

Imperfect Tense.

1. I loved.
2. Thou lovedst.
3. He loved.

1. We loved.
2. Ye *or* you loved
3. They loved.

Perfect Tense.

1. I have loved.
2. Thou hast loved.
3. He hath *or* has lov'd.

1. We have loved.
2. Ye *or* you have loved.
3. They have loved.

Pluperfect Tense.

1. I had loved.
2. Thou hadst loved.
3. He had loved.

1. We had loved.
2. Ye *or* you had loved
3. They had loved.

First Future Tense.

1. I shall *or* will love.
2. Thou shalt *or* wilt love.
3. He shall *or* will love.

1. We shall *or* will love.
2. Ye *or* you shall *or* will love
3. They shall *or* will love.

Second Future Tense.

1. I shall have loved.
2. Thou wilt have loved.
3. He will have loved.

1. We shall have loved.
2. Ye *or* you will have loved
3. They will have loved.

IMPERATIVE MOOD.

PERSON. SINGULAR.

1. Let me love.
2. Love thou, *or* do thou love.
3. Let him love.

PERSON. PLURAL.

1. Let us love.
2. Love ye *or* you, *or* do ye love.
3. Let them love.

POTENTIAL MOOD.

Present Tense.

- | | |
|-------------------------------------|---|
| 1. I may <i>or</i> can love. | 1. We may <i>or</i> can love. |
| 2. Thou mayst <i>or</i> canst love. | 2. Ye <i>or</i> you may <i>or</i> can love. |
| 3. He may <i>or</i> can love. | 3. They may <i>or</i> can love. |

Imperfect Tense.

- | | |
|---|---|
| 1. I might, could, would, <i>or</i> should love. | 1. We might, could, would, <i>or</i> should love. |
| 2. Thou mightst, couldst, wouldst, <i>or</i> shouldst love. | 2. Ye <i>or</i> you might, could, would, <i>or</i> should love. |
| 3. He might, could, would, <i>or</i> should love. | 3. They might, could, would, <i>or</i> should love. |

Perfect Tense.

- | | |
|---|---|
| 1. I may <i>or</i> can have loved. | 1. We may <i>or</i> can have loved. |
| 2. Thou mayst <i>or</i> canst have loved. | 2. Ye <i>or</i> you may <i>or</i> can have loved. |
| 3. He may <i>or</i> can have loved. | 3. They may <i>or</i> can have loved. |

Pluperfect Tense.

- | | |
|---|---|
| 1. I might, could, would, <i>or</i> should have loved. | 1. We might, could, would, <i>or</i> should have loved. |
| 2. Thou mightst, couldst, wouldst, <i>or</i> shouldst have loved. | 2. Ye <i>or</i> you might, could, would, <i>or</i> should have loved. |
| 3. He might, could, would, <i>or</i> should have loved. | 3. They might, could, would, <i>or</i> should have loved. |

SUBJUNCTIVE MOOD.

Present Tense.

PERSON. SINGULAR.

1. If I love.
2. If thou love.
3. If he love.

PERSON. PLURAL.

1. If we love.
2. If ye or you love.
3. If they love.

INFINITIVE MOOD.

Present. To love.*Perfect.* To have loved.

PARTICIPLES.

Present. Loving.*Perfect.* Loved*Compound Perfect.* Having loved.

PASSIVE.

Verbs passive are called regular when they form their perfect participle by the addition of *d* or *ed* to the verb; as, from the verb *to love* is formed the passive, *I am loved*, *I was loved*, *I shall be loved*, &c. A passive verb is conjugated by adding the perfect participle to the auxiliary *to be*, through all its changes of number, person, mood, and tense.

ADVERB.

An Adverb is a part of speech joined to a verb, an adjective, and sometimes to another adverb, to express some quality or circumstance respecting it: as, he reads *well*; a *truly* good man; he writes *very correctly*.

Some adverbs are compared; thus, *soon*, *sooner*, *soonest*; *often*, *oftener*, *oftenest*. Those ending in *ly* are compared by *more*, and *most*; as, *wisely*, *more wisely*, *most wisely*.

The following are a few of the adverbs:

Once	lastly	presently	quickly	not
now	before	often	perhaps	how
here	lately	much	indeed	more.

PREPOSITION.

Prepositions serve to connect words with one another, and to show the relation between them. They are, for the

most part, set before nouns and pronouns ; as, he went *from* London *to* York ; she is *above* disguise ; they are supported *by* industry.

The following is a list of the principal prepositions :

Of	into	above	at	off
to	within	below	near	on or upon
for	without	between	up	among
by	over	beneath	down	after
with	under	from	before	about
in	through	beyond	behind	against.

CONJUNCTION.

A Conjunction is a part of speech that is chiefly used to connect sentences ; so as out of two or more sentences to make but one. It sometimes connects only words.

Conjunctions are principally divided into two sorts, the *copulative* and *disjunctive*.

The conjunction copulative serves to connect or to continue a sentence, by expressing an addition, a supposition, a cause, &c. ; as, he *and* his brother reside in London ; I will go, *if* he will accompany me ; you are happy, *because* you are good.

The conjunction disjunctive serves not only to connect and continue the sentence, but also to express opposition of meaning in different degrees ; as, *though* he was frequently reproved, *yet* he did not reform ; they came with her, *but* went away without her.

The following is a list of the principal conjunctions :

The *copulative*—And, that, both, for, therefore, if, then, since, because, wherefore.

The *disjunctive*—But, than, though, either, or, as, unless, neither, nor, lest, yet, notwithstanding.

INTERJECTION.

Interjections are words thrown in between the parts of a sentence, to express the passions or emotions of the speaker ; as, *Oh !* I have alienated my friends ; *alas !* I fear for life ! *O* virtue ! how amiable thou art !

The following are some of the interjections : *Oh !* *pish !* *heigh !* *lo !* *behold* *ah !* *tush !* *fie !* *hush !* *hail !*

DERIVATION.

Words are derived from one another in various ways, namely:

1. Substantives are derived from verbs; as, from *to love* comes *lover*.

2. Verbs are derived from substantives, adjectives, and sometimes from adverbs; as, from *salt* comes *to salt*, from *warm* comes *to warm*, from *forward* comes *to forward*.

3. Adjectives are derived from substantives; as, from *health* comes *healthy*.

4. Substantives are derived from adjectives; as, from *white* comes *whiteness*.

5. Adverbs are derived from adjectives; as, from *base* comes *basely*.

SYNTAX.

THE third part of grammar is syntax; which treats of the agreement and construction of words in a sentence.

A sentence is an assemblage of words, forming a complete sense.

Sentences are of two kinds, *simple* and *compound*.

A simple sentence has in it but one subject, and one finite verb; as, "Life is short."

A compound sentence consists of two or more simple sentences, joined together by one or more connective words; as, "Life is short, and art is long."

A phrase is two or more words rightly put together, making sometimes part of a sentence, and sometimes a whole sentence.

The principal parts of a simple sentence are, the subject, the attribute, and the object.

The subject is the thing chiefly spoken of; the attribute is the thing or action affirmed, or denied of it; and the object is the thing affected by such action.

The nominative denotes the subject, and usually goes before the verb or attribute; and the word or phrase denoting the object follows the verb; as, "A wise man governs his passions." Here, *a wise man* is the subject; *governs*, the attribute, or thing affirmed; and *his passions*, the object.

Syntax principally consists of two parts, *concord* and *government*.

Concord is the agreement which one word has with another, in gender, number, case, or person.

Government is that power which one part of speech has over another, in directing its mood, tense, or case.

Rule 1.

A verb must agree with its nominative case in number and person ; as, "I learn ;" "Thou art improved ;" "The birds sing."

Rule 2.

Two or more nouns, &c. in the singular number, joined together by a copulative conjunction, expressed or understood, have verbs, nouns, and pronouns agreeing with them in the plural number ; as, "Socrates and Plato *were* wise, *they* were the most eminent philosophers of Greece ;" "The sun that rolls over our heads, the food that we receive, the rest we enjoy, daily *admonish* us of a superior and superintending Power."

Rule

The conjunction disjunctive has an effect contrary to that of the conjunction copulative ; for as the verb, noun, or pronoun is referred to the preceding terms taken separately, it must be in the singular number ; as, "Ignorance or negligence *has* caused this mistake ;" "John, or James, or Joseph, *intends* to accompany me ;" "There *is* in many minds neither knowledge nor understanding."

Rule 4.

A noun of multitude, or signifying many, may have a verb or pronoun agreeing with it, either of the singular or plural number ; yet not without regard to the import of the word, as conveying unity or plurality of idea ; as, "The meeting *was* large ;" "The nation *is* powerful ;" "My people *do* not consider, *they* have not known me ;" "The multitude eagerly *pursue* pleasure, as *their* chief good ;" "The council *were* divided in *their* sentiments."

Rule 5.

Pronouns must always agree with their antecedents, and the nouns for which they stand, in gender and number ; as, "This is the friend *whom* I love ;" "That is the vice

which I hate ;” “ The king and the queen had put on *their* robes ;” “ The moon appears, and *she* shines, but the light is not *her* own.”

The relative is of the same person as the antecedent, and the verb agrees with it accordingly ; as, “ Thou, *who* lovest wisdom ;” “ I, *who* speak from experience.”

Rule 6.

The relative is the nominative case to the verb, when no nominative comes between it and the verb ; as, “ The master *who* taught us ;” “ The trees *which* are planted.”

When a nominative comes between the relative and the verb, the relative is governed by some word in its own member of the sentence ; as, “ He *who* preserves me, to *whom* I owe my being, *whose* I am, and *whom* I serve, is eternal.”

Rule 7.

When the relative is preceded by two nominatives of different persons, the relative and verb may agree in person with either, according to the sense ; as, “ I am the man *who* command you ;” or, “ I am the man *who* commands you.”

Rule 8.

Every adjective, and every adjective pronoun, belongs to a substantive, expressed or understood ; as, “ He is a good, as well as a wise man ;” “ Few are happy ;” that is, *persons* ;” “ This is a pleasant walk ;” that is, “ *This walk* is,” &c.

Adjective pronouns must agree in number with their substantives ; as, “ This book, these books ; that sort, those sorts ; another road, other roads.”

Rule 9.

The article *a* or *an* agrees with nouns in the singular number only, individually or collectively ; as “ A Christian, an infidel, a score, a thousand.”

The definite article *the* may agree with nouns in the singular or plural number : as, “ The garden, the houses, the stars.”

The articles are often properly omitted : when used they should be justly applied, according to their distinct nature, as, “ Gold is corrupting ;” “ The sea is green ;” A lion is bold.”

Rule 10.

One substantive governs another, signifying a different

thing, in the possessive or genitive case; as, "My use;" "Man's happiness;" "Virtue's reward."

Rule 11.

Active verbs govern the objective; as, "Truth ennobles *her*;" "She comforts *me*;" "They support *us*;" "Virtue rewards *her* followers."

Rule 12.

One verb governs another that follows it, or depends upon it, in the infinitive mood; as, "Cease *to do* evil; learn *to do* well;" "We should be prepared *to render* an account of our actions."

The preposition *to*, though generally used before the latter verb, is sometimes properly omitted; as, "I heard him say it:" instead of, "*to say it*."

Rule 13.

In the use of words and phrases which, in point of time, relate to each other, a due regard to that relation should be observed. Instead of saying, "The Lord *hath given*, and the Lord *hath taken away*;" we should say, "The Lord *gave*, and the Lord *hath taken away*." Instead of, "I *remember* the family more than twenty years;" it should be "*I have remembered* the family *more than twenty years*."

Rule 14.

Participles have the same government as the verbs from which they are derived; as, "I am weary with *hearing him*;" "She is *instructing us*;" "The tutor is *admonishing Charles*."

Rule 15.

Adverbs, though they have no government of case, tense, &c. require an appropriate situation in the sentence, namely, for the most part before adjectives, after verbs active or neuter, and frequently between the auxiliary and the verb; as, "He made a *very sensible* discourse; he *spoke unaffectedly* and *forcibly*; and *was attentively heard* by the whole assembly."

Rule 16.

Two negatives, in English, destroy one another, or are equivalent to an affirmative; as, "Nor did they *not* perceive him;" that is, "they did perceive him;" "His lan-

guage, though inelegant, is *not ungrammatical*;" that is, "it is grammatical."

Rule 17.

Prepositions govern the objective case; as, "I have heard a good character *of her*;" "From *him* that is needy, turn not away;" "A word to the wise is sufficient *for them*;" "We may be good and happy *without riches*."

Rule 18.

Conjunctions connect the same moods and tenses of verbs, and cases of nouns and pronouns; as, "Candour is *to be approved and practised*;" "If thou sincerely *desire, and earnestly pursue* virtue, she *will assuredly be found* by thee, *and prove* a rich reward;" "The master taught *her and me* to write;" "*He and she* were school-fellows."

Rule 19.

Some conjunctions require the indicative, some the subjunctive mood after them. It is a general rule, that when something contingent or doubtful is implied, the subjunctive ought to be used; as, "*If I were* to write, he *would* not regard it;" "He will not be pardoned *unless he repent*."

Conjunctions that are of a positive and absolute nature require the indicative mood; "*As* virtue *advances* so vice *recedes*;" "He is healthy *because* he is temperate."

Rule 20.

When the qualities of different things are compared, the latter noun or pronoun is not governed by the conjunction *than* or *as*, but agrees with the verb, or is governed by the verb or the preposition, expressed or understood; as, "Thou *art* wise *than* I;" that is, "than I am;" "They loved him more *than* me;" that is, "more than they loved me;" "The sentiment is well expressed by Plato, but much better by Solomon *than* him;" that is, "than by him."

Rule 21.

To avoid disagreeable repetitions, and to express our ideas in few words, an ellipsis, or omission of some words, is frequently admitted. Instead of saying, "He was a learned man, he was a wise man, and he was a good man;" we use the ellipses, and say "He was a learned, wise, and good man."

When the omission of words would obscure the sentence, weaken its force, or be attended with an impropriety, they must be expressed. In the sentence, "We are apt to love who love us," the word *them* should be supplied. "A beautiful field and trees," is not proper language? it should be, "Beautiful fields and trees;" or, "A beautiful field and five trees."

Rule 22.

All the parts of a sentence should correspond to each other; a regular and dependent construction throughout should be carefully preserved. The following sentence is therefore inaccurate; "He was more beloved, but not so much admired as Cinthio;" it should be, "He was more beloved than Cinthio, but not so much admired."

PROSODY.

PROSODY consists of two parts; the former teaches the true pronunciation of words, comprising ACCENT, QUANTITY, EMPHASIS, FAUSE, and TONE; and the latter, the laws of VERSIFICATION.

Accent.

Accent is the laying of a peculiar stress of the voice on a certain letter or syllable in a word, that it may be better heard than the rest, or distinguished from them; as, in the word *presu'me*, the stress of the voice must be on the letter *u*, and second syllable, *su'me*, which take the accent.

Quantity.

The quantity of a syllable is that time which is occupied in pronouncing it. It is considered as long or short.

A vowel or syllable is long when the accent is on the vowel; which occasions it to be slowly joined, in pronunciation, to the following letter: as, *fāll*, *bale*, *mōōd*, *hōuse*, *fēature*.

A syllable is short when the accent is on the consonant; which occasions the vowel to be quickly joined to the succeeding letter; as, *an't*, *bon' t*, *ban'ger*.

A long syllable requires double the time of a short one in pronouncing it; thus, *mate* and *note* should be pronounced as slowly again as *mat* and *not*.

•
Emphasis.

By emphasis is meant a stronger and fuller sound of voice, by which we distinguish some word or words on which we design to lay particular stress, and to show how it affects the rest of the sentence. Sometimes the emphatic words must be distinguished by a particular tone of voice, as well as by a greater stress.

Pauses.

Pauses or rests, in speaking and reading, are a total cessation of the voice, during a perceptible, and, in many cases, a measurable space of time.

•
Tones.

Tones are different both from emphasis and pauses, consisting in the modulation of the voice, the notes or variations of sound which we employ, in the expression of our sentiments.

•
Versification.

Versification is the arrangement of a certain number and variety of syllables, according to certain laws.

Rhyme is the correspondence of the last sound of one verse to the last sound or syllable of another.

PUNCTUATION.

PUNCTUATION is the art of dividing a written composition into sentences, or parts of sentences, by points or stops, for the purpose of marking the different pauses, which the sense and an accurate pronunciation require.

The comma represents the shortest pause; the Semicolon, a pause double that of the comma; the Colon, double that of the semicolon; and the Period, double that of the colon.

The points are marked in the following manner ;

The Comma ,	The Colon :
The Semicolon ;	The Period .

Comma.

The comma usually separates those parts of a sentence which, though very closely connected in sense, require a pause between them; as, " I remember, with gratitude, his love and services." " Charles is beloved, esteemed, and respected."

Semicolon.

The semicolon is used for dividing a compound sentence into two or more parts, not so closely connected as those which are separated by a comma, nor yet so little dependent on each other, as those which are distinguished by a colon : as, " Straws swim on the surface ; but pearls lie at the bottom."

Colon.

The colon is used to divide a sentence into two or more parts, less connected than those which are separated by a semicolon ; but not so independent as separate distinct sentences ; as, " Do not flatter yourselves with the hope of perfect happiness : there is no such thing in the world "

Period.

When a sentence is complete and independent, and not connected in construction with the following sentence, it is marked with a period ; as, " Fear God. Honour the King. Have charity towards all men."

Besides the points which mark the pauses in discourse, there are others that denote a different modulation of voice, in correspondence to the sense. These are,

The Interrogative point ?

The Exclamation point !

Parenthesis ()

as, Are you sincere ? How excellent is a grateful heart !

Know then this truth (enough for man to know)

Virtue alone is happiness below.

The following characters are also frequently used in composition.

An Apostrophe, marked thus ' ; as, tho', judg'd.

A Caret, marked thus ^ ; as, I ^{am} diligent.

• A Hyphen, which is thus marked - ; as lap-dog, to-morrow.

The Acute Accent, marked thus ' ; as, fan'cy.

The Grave Accent, thus ` ; as, favour.

The proper mark to distinguish a long syllable is this as rosy : and a short one, this ` ; as folly. This last mark is called a Breve.

A Diæresis, thus marked ¨, shews that two vowels form separate syllables ; as, Creätor.


A Section is thus marked §.

A Paragraph, thus ¶.

A Quotation has two inverted commas at the beginning, and two direct ones at the end of a phrase or passage ; as,

“ The proper study of mankind is man.”

Crotchets or Brackets serve to enclose a particular word or sentence. They are marked thus [].

An Index or hand  points out a remarkable passage.

A Brace { unites three poetical lines ; or connects a number of words, in prose, with one common term.

An Asterisk, or little star *, directs the reader to some note in the margin.

An Ellipsis is thus marked — ; as, K—g, for King.

An Obelisk, which is marked thus †, and Parallels thus ||, together with the letters of the alphabet, and figures, are used as references to the margin.

• • • CAPTALS.

THE following words should begin with capitals :

1st. The first word of every book, chapter, letter, paragraph, &c.

2nd. The first word after a period, and frequently after the notes of interrogation and exclamation.

• 3rd. The names of the Deity ; as, God, Jehovah, the Supreme Being, &c.

4th. Proper names of persons, places, ships, &c.

5th. Adjectives derived from the proper names of places, as, Grecian, Roman, English, &c.

6th. The first word of a quotation in a direct form ; as
“ Always remember this ancient maxim, ‘ Know thyself.’ ”

7th. The first word of every line in poetry.

8th. The pronoun *I*, and the interjection *O* !

9th. Words of particular importance ; as, the Reformation, the Restoration, the Revolution.

PARSING.

WHEN the pupil has passed through the whole of the preceding rules and gained a thorough knowledge of the parts of speech, in all their moods, cases, &c. he should then proceed to some examples, in order to familiarize the subject to his mind, and be able to answer correctly, on being asked the grammatical construction of any word or sentence. This is done by what is called parsing, a few specimens of which are given in the following sentences.

Hope animates us.

A peaceful mind is virtue's reward.

Vice degrades us.

He who lives virtuously prepares for all events

If folly entice thee reject its allurements.

EXERCISES IN PARSING

Hope animates us.

Hope is a common substantive, of the neuter gender, the third person, in the singular number, and the nominative case. *Animates* is a regular verb active, indicative mood, present tense, third person singular. *Us* is a personal pronoun, first person plural, and in the objective case.

A peaceful mind is virtue's reward.

A is the indefinite article. *Peaceful* is an adjective. *Mind* is a common substantive, of the neuter gender, the third person, in the singular number, and the nominative case. *Is* is an irregular verb neuter, indicative mood, present tense, and the third person singular. *Virtue's* is a common substantive, of the third person in the singular number, and the possessive case. *Reward* is a common substantive, of the third person, in the singular number, and the nominative case.

Vice degrades us.

•*Vice* is a common substantive, of the neuter gender, the third person, in the singular number, and the nominative case. *Degrades* is a verb active, indicative mood, present tense, third person singular, agreeing with its nominative *vice*. [See Rule 1.] *Us* is a personal pronoun, first person plural, in the objective case, and governed by the active verb *degrades*.

•
He who lives virtuously prepares for all events.

He is a personal pronoun, of the third person, singular number, and masculine gender. *Who* is a relative pronoun, which has for its antecedent *he*, with which it agrees in gender and number. [Rule 5.] *Lives* a regular verb neuter, indicative mood, present tense, third person singular, agreeing with its nominative *who*. [Rule 6.] *Virtuously* is an adverb. *Prepares* a verb neuter, indicative mood, present tense, third person singular, agreeing with its nominative *he*. *For* is a preposition. *All* is an adjective pronoun, of the indefinite kind, the plural number, and belongs to its substantive *events*, with which it agrees. [Rule 8.] *Events* is a common substantive of the third person, in the plural number, and the objective case governed by the preposition *for*. [Rule 17.]

If folly entice thee reject its allurements.

If is a copulative conjunction. *Folly* is a common substantive of the third person, in the singular number, and the nominative case. *Entice* is a verb active, subjunctive mood, present tense, third person singular, and is governed by the conjunction *if*. [Rule 19.] *Thee* is a personal pronoun, of the second person singular, in the objective case, governed by the active verb *entice*. [Rule 11.] *Reject* is a regular active verb, imperative mood, second person singular, and agrees with its nominative case, *thou*, implied. *Its* is a personal pronoun, third person, singular number, and the neuter gender, to agree with its substantive *folly*. [Rule 5.] It is in the possessive case, governed by the noun *allurements*. [Rule 10.] *Allurements* is a common substantive, of the neuter gender, the third person, in the plural number, and the objective case, governed by the verb *reject*. [Rule 11.]

Several other exercises in prose and verse are here subjoined for the learner's practice.

Prose.

Dissimulation in youth is the forerunner of perfidy in old age. Its first appearance is the fatal omen of growing depravity, and future shame.

If we possess not the power of self-government, we shall be the prey of every loose inclination that chances to arise. Pampered by continual indulgence, all our passions will become mutinous and headstrong. Desire, not reason, will be the ruling principle of our conduct.

Absurdly we spend our time in contending about the trifles of a day, while we ought to be preparing for a higher existence.

How little do they know of the true happiness of life, who are strangers to that intercourse of good offices and kind affections, which, by a pleasing charm, attracts men to one another, and circulates rational enjoyment from heart to heart.

If we view ourselves, with all our imperfections and failings, in a just light, we shall rather be surprised at our enjoying so many good things, than discontented because there are which we want.

Verse.

Vice is a monster of so frightful mien,
As, to be hated, needs but to be seen :
Yet seen too oft, familiar with her face,
We first endure, then pity, then embrace.

If nothing more than purpose in thy power
Thy purpose firm, is equal to the deed :
Who does the best his circumstance allows,
Does well, acts nobly ; angels could no more.

To be resign'd when ills betide,
Patient when favours are denied,
And pleas'd with favours given :
Most surely this is wisdom's part,
This is that incense of the heart,
Whose fragrance smells to heav'n.

THE
YOUNG MAN'S COMPANION;

YOUTH'S INSTRUCTOR

PART II.
READING AND WRITING.

READING AND WRITING.

THE knowledge of letters is one of the greatest blessings that ever God bestowed on the children of men: by this means mankind are enabled to preserve the memory of things done in their own times, and to lay up a rich store of knowledge for all succeeding generations.

By the art of reading we learn a thousand things which our eyes can never see, and which our own thoughts would never have reached: we are instructed by books in the wisdom of ancient times; we learn what our ancestors have said and done, and enjoy the benefit of the wise and judicious remarks which they have made through their whole course of life, without the fatigue of their long and painful experiments. By this means children may be led, in a great measure, into the wisdom of old age. It is by the art of reading that we can sit at home, and acquaint ourselves with what has been done in the distant parts of the world. The histories and the customs of all ages and all nations are brought, as it were, to our doors. By this art we are made acquainted with the affairs of the Jews, the Greeks, and the Romans; their wars, their laws, and their religion: we can tell what they did in the nations of Europe, Asia, and Africa, above a thousand years ago.

But the greatest blessing that we derive from reading is, the knowledge of the Holy Scriptures; wherein God has conveyed down to us the discoveries of his wisdom, power, and grace, through many past ages; and whereby we attain the knowledge of Christ, and of the way of salvation by a Mediator.

It must be confessed, that in former ages, before printing was invented, the art of reading was not so common even in polite nations, because books were much more costly,

since they must have been all written with a pen, and were therefore hardly to be obtained by the bulk of mankind; but since the providence of God has brought printing into the world, and knowledge is so plentifully diffused through our nation, at so cheap a rate, it is to be lamented that any children should be born and brought up in Great Britain, without learning to read; and especially, since by this means every one may see with his own eyes what God requires of him in order to eternal happiness.

The art of writing also is so exceedingly useful, and is now become so very common, that children in general may attain it at an easy rate. By this means we communicate our thoughts and all our affairs to our friends at ever so great a distance; we tell them our wants, our sorrows, and our joys; and interest them in our concerns, as though they were near us; we maintain correspondence and traffic with persons in distant nations; and the wealth and grandeur of Great Britain is maintained by this means. By the art of writing we treasure up all things that concern us in a safe repository; and as often as we please, by consulting our paper records, we renew our remembrance of things that relate to this life or the life to come.

INSTRUCTIONS FOR LEARNING TO WRITE.

It is necessary to be provided with good pens, ink, and paper, likewise a flat ruler for sureness, and a round one for dispatch; with a leaden plummet or pencil to rule lines.

The principal things to be aimed at, in order to write well, are these two; first, to get an exact idea of a good letter, which may be done by frequent observation of the annexed copperplate: the other is, to gain such a command of hand, as to be able to express, with readiness, the idea upon the paper; which is only attained by careful and constant practice. It will be necessary now to mention more particularly some things to be always observed in writing.

1. The essential properties of a good piece of writing are, a due proportion of the characters throughout the whole; a just distance between the letters themselves, as well as the words; a natural leaning or inclination of the letters one to another; together with a clean smooth stroke performed with a masterly boldness and freedom.

The proportion of the several letters, in most hands, is generally regulated by the *o* and *n*; therefore let the making of them be the first of your care and practice; and the other letters must be of the same fulness of stroke as they are.

The proportion and shape of the letters in any hand ought to be the same, whether they are written in a large or small size; therefore let every hand be first learned in a large character; which will not only fix the idea of a good letter sooner in your mind, but also give you a much greater freedom, and in a shorter time than writing in small characters. It is certain, that the lesser is always contained in the greater; and he who attains to write any hand large, may soon write it as small as he pleases.

2. Hold your pen between the two fore-fingers extended almost straight, and the thumb bending a little outward, and in your right hand, with the hollow side of your pen downwards, and the nib flat upon the paper: let it rest between the two upper joints of the fore-finger, and upon the end of the middle one, about an inch from the nib of the pen; the end of the little finger, and that which is next to it, bent in towards the palm of the hand, about half an inch distant from the end of the middle finger. Let the book or paper lie directly before you, and your hand rest only on the tip of your little finger; let no other part of your arm or wrist touch the paper or desk; let your elbow be almost close to your side, and the pen pointed towards the outer part of the right shoulder: rest your left arm very lightly between the wrist and elbow, keeping your body upright, and from touching the desk. And for the slope hands, turn your left side a little towards the desk; but in the upright ones, let the body be directly before it, and the right elbow turned outward from your side.

* * * *The above remarks are fully exemplified in the annexed COPPERPLATES, in which are two Alphabets, accompanied by specimens of different sorts of writing.*

TO MAKE A PEN

Scrape off the thin rind of the quill with the back edge of your penknife, and hold it in your left hand, with the feather end from you: then enter the back thereof sloping,

and cut off in length twice the circumference of the quill, and then cut off as much from the inside. Then turn the quill and enter your penknife into the middle of the back, taking care that the blade, in making the slit, shall not incline to the one side nor to the other. Then put in the peg of your penknife handle, or the end of a whole quill, and with a sudden twitch force up the slit, holding your left thumb upon the back of the quill, to prevent the slit from going too far. Then enter your knife, sloping on the other side above the slit, about twice the breadth of the quill, and cut away the cradle-piece; then turn the back upwards, and cut down to the end of the cheek or shoulder-pieces, and in so doing turn the knife on both sides towards the back. Then place the inside of the end or nib of the pen upon the nail of your left thumb, holding the quill fast between the fore and middle fingers of that hand. To finish the nib, enter the edge of the knife on the back, and near the end thereof, sloping; and immediately turning the edge almost downward, cut it off.

TO MAKE THE BEST BLACK INK.

To six quarts of rain water put one pound and a half of fresh blue galls of Aleppo, bruised small: eight ounces of copperas, clean, rocky and greer; eight ounces of gum-arabic; and two ounces of roche-alum. Let these stand together in a large stone bottle: shake it well once every day, and you will have fine ink in about a month's time: and the older it grows the better it will be for use.

Ingredients for a Quart.

One quart of water, four ounces of galls, two ounces of copperas, and two ounces of gum, mixed and stirred as above.

TO MAKE RED INK.

Take three pints of vinegar, and four ounces of ground Brazil wood, simmer them together for half an hour; then put in four ounces of roche-alum: and these three are to simmer together for half an hour: then strain it through a flannel, and bottle it up, well stopped, for use.

A second Method.

Take half a pound of quick lime and two quarts of water ; mix them together, and let them stand a day and a night ; then pour off the clear water, and put a pound of Brazil wood shavings into it : boil it half away, or till upon trial the red liquor is strong enough to write with ; this done, put in two ounces of gum-arabic, and one ounce of alum : when these are dissolved, strain off the ink, and keep it for use.

A third Method.

Take a pint of stale beer, two ounces of shavings of Brazil wood, half a quarter of an ounce of cochineal, two ounces of roche-alum ; boil them together, pour off the clear liquid, and add thereto an ounce of gum-arabic.

To make Japan Ink.

Take of gum-arabic and Roman vitriol, each one ounce ; of galls well bruised, a pound ; put them into rape vinegar, or vinegar made of clean small beer : let them remain in a warm place, often stirring them, till the liquor becomes black ; then add to a gallon, an ounce of ivory black, and a quarter of an ounce of seed-lac varnish ; and it will be a curious black shining ink.

To keep Ink from freezing or growing mouldy.

In hard frosty weather ink will be apt to freeze, which if it does, it will be good for nothing ; for it takes away all its blackness and beauty : to prevent which, if you have not the convenience of keeping it from the cold, put a few drops of brandy, or other spirits, into it, and it will not freeze : and to hinder it from growing mouldy, put a little salt into it.

How to write secret Letters.

Write a letter with the juice of onions ; and let the person who is to read it hold the paper near the fire till the writing appears of a reddish colour, and the letter may be easily read.

Another Way.

Write what you would have seen on one side of the paper with common ink, and on the other side with milk that

which you would have secret ; and when you would make the same legible, direct your friend to hold that side which is written with ink to the fire, and the milky letters will shew bluish on the other side, and easily be read.

LETTER-WRITING.

THE great utility of epistolary writing is so well known, that the necessity of being acquainted with an art replete with such advantages is needless to insist upon. Those who are accomplished in it, are too happy in their knowledge to need farther information concerning its excellence. And such as are unqualified to convey their sentiments to a friend, without the assistance of a third person, feel their deficiency so severely, that nothing need be said to convince them it is their interest to become acquainted with what is so necessary and agreeable.

Had letters been known at the beginning of the world epistolary writing would have been as old as love and friendship ; for, as soon as they began to flourish, the verbal messenger was dropped, the language of the heart was committed to characters that faithfully preserved it, secrecy was maintained, and social intercourse rendered more free and agreeable.

Some of the most ancient compositions were written in this manner, and the light of the gospel was delivered by the holy apostles in the epistolary way.

The Romans were perfect masters of this art, as Cicero's letters sufficiently evince ; nor are the moderns less sensible of its excellencies. Some of the finest French writers have built their fame upon epistolary correspondence ; and the English are at present so convinced of the advantages attending this method of conveying their sentiments, that it seems to have triumphed over almost every other species of composition ; the historian has adopted it ; we have the Greek and Roman histories, as well as that of our own nation, admirably executed in letters. Almost every thing didactic and preceptive is delivered in this way ; the novelist finds it better adapted to his purpose than any other mode of writing. No great poet is without his familiar

epistle to his friend; and the traveller seemed lost, till he found the method of conveying his intelligence in letters.

Letters are the life of trade, the fuel of love, the pleasure of friendship, the food of the politician, and the entertainment of the curious.

To speak to those we love or esteem is the greatest satisfaction we are capable of knowing, and the next is being able to converse with them by letter.

It was a just observation of the honest Quaker, that, *If a man thinks twice before he speaks, he'll speak twice the better for it.* With great propriety the above may be applied to all sorts of epistolary writing.

In letters from one relation to another the different characters of the person must first be considered. Thus a father in writing to his son will use a gentle authority; a son to a father will express a filial duty. And again, in friendship the heart will dilate itself with an honest freedom; it will applaud with sincerity, and censure with modest reluctance.

In letters concerning trade the subject matter will be constantly kept in view, and the greatest perspicuity and brevity observed by the different correspondents; and in like manner these rules may be applied to all other subjects and conditions of life, namely, a comprehensive idea of the subject, and an unaffected simplicity, though modesty in expression. Nothing more need be added; only that a constant attendance to the above, for a few months, will soon convince the learner that his time has not been spent in vain.

Indeed an assiduous attention to the study of any art, even the most difficult, will enable the learner to surmount every difficulty, and writing letters to his correspondents will become as easy as speaking in company. A careful attention to the plain and simple rules laid down in the preceding Grammar, will enable him to write in the language of the present time; and if he carefully avoid affectation, his thoughts will be clear, his sentiments judicious, and his language plain, easy, sensible, elegant, and suited to the nature of the subject. As letters are the copies of conversation, just consider what you would say to your friend if he were present, and write down the very words you would speak, which will render your epistle unaffected and intelligible.

SPECIMENS OF LETTER-WRITING

Man in the Country to a Merchant in London, offering Correspondence.

SIR,

MY apprenticeship with Mr. Wilson being expired during which I had proofs of your integrity in all your dealings with my worthy master, my parents have given me two hundred pounds to begin the world: but you know it is not sufficient to carry on trade to any advantage, unless I can have my goods from the first hand, and likewise the usual time of credit. If it is agreeable to you, I hereby offer you my correspondence, not doubting but you will use me as well as you did Mr. Wilson, and you may depend on my punctuality with respect to payment.

My late master has no objection to my setting up, as it will not be in the least prejudicial to his business. I shall depend on your sending me the following order as soon and as cheap as possible, and am, &c.

Your humble servant.

The Merchant's Answer.

SIR,

Yours I received, and am glad to hear that your parents have enabled you to open a shop for yourself. Your behaviour to your late master was such, that it cannot fail of procuring you many customers. I have sent you the goods by the Stafford waggon, in twelve parcels, marked L. H: and I doubt not but you will be punctual in your returns, which will always enable me to serve you as low as possible, and with the best goods I can procure. I heartily wish you success in business, and doubt not but you well know, that honesty and assiduity are the most likely means to ensure it, and am

To a Correspondent, requesting the Payment of a Sum of Money.

SIR,

Although the balance of the account between us has been of long standing in my favour, yet I would not have applied to you at present, had not a very unexpected demand been made upon me for a considerable sum, which, without your assistance, it is not in my power to answer. When I have an opportunity of seeing you, I shall then inform you of the nature of this demand, and the necessity of my discharging it. I hope you will excuse me this freedom, which nothing but a regard to my credit and family could oblige me to take. If it does not suit you to remit the whole, part will be thankfully received by

Your humble servant.

The Answer.

SIR,

I have just received yours, and am sorry to hear of your affliction. That the account between us was not sooner settled, was owing to the failure of two principal creditors. I have just received a remittance from Nottingham, and am greatly pleased that it is in my power to answer the whole of your demand. The balance between us is two hundred and fifty pounds, for which I have enclosed an order on Mr. Cash, the banker. I hope you will surmount this and every other difficulty, and am

Your sincere well-wisher.

From a young Person in Trade to a wholesale Dealer who had suddenly made a Demand on him.

SIR,

Your demand coming very unexpectedly, I must confess I am not prepared to answer it. I know the stated credit in this article used only to be four months; but as it has been always the custom to allow at least two months more, I did not think you would have sent for it till that time, and consequently trusted to a practise so long established in trade. Sir, I beg you will not suppose it is any deficiency which prevents me from complying with your request, nor shall I ask any more time than is usual. If you will be pleased to let your servant call this day three weeks for the one half of the sum, it shall be ready, and the remainder in

a fortnight after. In the mean time, I beg that you will not let any word slip concerning this, as very little will hurt a young beginner. Sir, you may take my word with the greatest safety, that I will pay you as I have promised ; and if you have any reason to demand the money sooner, be pleased to let me know, that if I have it not I may borrow it ; for if I have lost my credit with you, I hope I have not done so with all the world.

I am, Sir, your humble servant.

The Answer.

SIR,

There is, no person in the world who would more willingly shew every indulgence to a young beginner than myself, and I am extremely sorry to press you on the present occasion ; but I have reasons : and although it is not always either fair or prudent to mention them, yet you will give me leave to ask the following question : whether you have any dealings with an usurer near Moorfields, and what is his name ? If you give me satisfaction on this head, I shall not urge the demand I have made upon you sooner than the time you mention ; but as it may be done at once, I expect your answer by the bearer, whom you well know, for he was, as he informs me, very lately your servant.

I assure you, Sir, it is in consideration of the great opinion I have of your integrity, that I refer the payment of my demand to a simple answer to this question ; but I fear that cannot be done.

I am your friend and well-wisher.

From a Young Gentleman to his Father

HONOUR'D SIR,

After intreating you to present my duty to my mother, and love to my sisters, I embrace this opportunity of letting you know how happily I am settled in the family of the worthy doctor. The good gentleman and his amiable lady do every thing in their power to make my life agreeable, during the intervals of my attendance on the public lectures. The doctor has begun to teach me geometry, and I hope soon to be able to make some progress in that useful science.

I have endeavoured to be as good an economist as possi-

ble, but at present am obliged to purchase several books ; I know your tenderness and generosity, and doubt not of hearing from you soon.

I am, Sir, your affectionate and dutiful son.

• *The Father's Answer.*

DEAR CHARLES,

I received your letter, and am greatly pleased to hear of the progress you make in your studies, as well as of your agreeable situation. I know the doctor is a worthy man ; and if your behaviour continues consistent with the duties of morality, you may be assured of his treating you with the same tenderness as if you were his own son.

As to the affair you mention, concerning the books, the enclosed order will convince you that nothing on my part shall be wanting to furnish you with every thing necessary ; as I am assured, from the whole of your former conduct, that you will not require any thing bordering on superfluity.

I am your affectionate father.

From a Gentleman to a Lady with whom he is in love.

MADAM,

I have three times attempted to give you a verbal relation of the contents of this letter ; but my heart as often failed. I know not in what light it may be considered, but if I can form any notion of my own heart, from the impression made on it by your many amiable qualities, my happiness in this world will, in a great measure, depend on your answer. I am not precipitate, madam, nor would I desire your hand, if your heart did not accompany it. My circumstances are independent, and my character hitherto unblemished, of which you shall have the most undoubted proof. You have already seen some of my relations at your aunt's, in Bond Street, particularly my mother, with whom I now live. Your aunt will inform you concerning our family ; and if it is to your satisfaction, I shall not only consider myself as extremely happy, but shall also make it the study of my future life to spend my days in the

company of her whom I prefer to all others in the world. I shall wait for your answer with the utmost impatience and am,

Madam, your real admirer

The Lady's Answer.

SIR,

I received your letter last night, and as it was on a subject least of all expected by me, you will not wonder when I tell you I was a good deal surprised. Although I have seen you at different times, yet I had not the most distant thoughts of your making proposals of such a nature. Some of your sex have often asserted that we are fond of flattery, and mightily pleased to be praised: I shall therefore suppose it true, and excuse you for those fulsome encomiums bestowed upon me in your letter; but am afraid, if I were to comply with your proposals, you would soon be convinced that the charms you mention, and seem to value so much, are merely exterior appearances, which, like the summer's flower, will very soon fade, and all those mighty professions of love will end at last either in indifference, or, which is worse, disgust. You desire me to enquire of my aunt concerning your character and family. You must excuse me when I tell you, that I am obliged to decline making any such enquiry. However, as your behaviour, when in my company, was always agreeable, I shall treat you with as much respect as is consistent with common decorum. My worthy guardian, Mr. Melvil, is now at his seat in Devonshire, and his conduct to me has been so much like that of a parent, that I cannot think of taking one step in an affair of such importance without both his consent and approbation. There is an appearance of sincerity throughout your letter; but there is one particular to which I have a very strong objection, it is this: you say that you live with your mother, yet you do not say you have either communicated your sentiments to her, or your other relations. I must freely and honestly tell you, that as I would not disoblige my own relations, so neither would I, on any consideration, admit of any addresses contrary to the inclinations of yours. If you can clear up this to my satisfaction, I shall send you a more explicit answer, and am, Sir,

Your most obedient humble servant

The Gentleman's Answer to the above.

DEAR MADAM,

I return you a thousand thanks for your letter, and it is with the greatest pleasure that I can clear up to your satisfaction that point on which you express your doubts. Before I wrote to you I communicated the affair to my two cousins; but had not sufficient courage to mention it to my mother: however that is now over; and nothing, she says, would give her greater pleasure, than to see me married to a young lady of your amiable character: nay, so far is she from having any objections, that she would have waited on you as the bearer of this, had I not persuaded her against it, as she has been these three days afflicted with a severe cold; and I was afraid, that if she had ventured abroad so soon, it might be attended with dangerous consequences. If you will give me leave to wait on you, I shall be able to explain things more particularly.

I am, dear madam, your real lover.

SUPERSCRPTIONS FOR LETTERS.

To the King's Most Excellent Majesty.

To the Queen's Most Excellent Majesty.

To the Prince. To his Royal Highness, &c.

• To the Princess. To her Royal Highness, &c.

To Archbishops. To his Grace the Lord Archbishop of Canterbury; or, To the Most Reverend Father in God, &c.

To Bishops. To the Right Reverend Father in God, &c.

To Deacons, Archdeacons, &c. To the Reverend A—B—, D. D. Dean of W——.

To the inferior Clergy. To the Rev. Mr. A—, &c.; or, To the Rev. Doctor, &c.

To the great Officers of State. To the Right Honourable T— Lord H—, Lord High Chancellor of Great Britain. Lord President of the Council. Lord Privy Seal. One of his Majesty's Principal Secretaries of State, &c.

• To temporal Lords. To his Grace the Duke of, &c. To the Most Honourable the Marquis of, &c. To the Right Honourable the Earl of, &c. To the Right Honourable the Lord Viscount, &c. To the Right Honourable the Lord, &c.

The eldest sons of Dukes, Marquises, and Earls enjoy, by the courtesy of England, the second title belonging to their father: thus the eldest son of the Duke of Bedford is called Marquis of Tavistock; of the Duke of Grafton, Earl of Euston; of the Earl of Macclesfield, Lord Viscount Parker, &c.; and their daughters are called Ladies, with the addition of their Christian and surname; thus, Lady Caroline Russel, Lady Augusta Fitzroy, Lady Betty Parker, &c.

The younger sons of Dukes are, in like manner, called Lords; and those of Marquises and Earls, together with all the children of Viscounts and Barons, are styled Honourable.

To a Baronet, Honourable; to a Knight, Right Worshipful; to an Esquire, Worshipful.

Every Privy Counsellor, though not a nobleman, has the title of Right Honourable.

All Ambassadors have the style of Excellency; as hath also the Lord Lieutenant of Ireland, and the Captain General of his Majesty's Forces.

The Lord Mayor of London, during his Mayoralty, has the title of Right Honourable; and the Sheriffs, during that office, have the title of Right Worshipful.

- All Mayors of Corporations have the title of Esquire during their office.

For the Beginning of Letters.

To the King. Sire; or, May it please your Majesty.

To the Queen. Madam; or, May it please your Majesty.

To the Prince. Sir; or, May it please your Royal Highness.

To the Princess. Madam; or, May it please your Royal Highness.

To a Duke. My Lord; or, May it please your Grace.

To a Duchess. Madam; or, May it please your Grace.

To an archbishop. May it please your Grace.

To a Marquis. My Lord; or, May it please your Lordship.

To a Marchioness. Madam; or, May it please your Ladyship.

To an Earl, Viscount, or Baron. My Lord; or, May it please your Lordship.

To their Consorts. Madam; or, May it please your Ladyship.

To a Bishop. My Lord ; or, May it please your Lordship.

To a Knight. Sir ; or, May it please your Worship.

To his Lady. Madam ; or, May it please your Ladyship.

To a Mayor, Justice of Peace, Esquire, &c. Sir ; or, May it please your Worship.

To the Clergy. Reverend Sir ; Mr. Dean ; Mr. Archdeacon ; Sir, &c. as circumstances may require.

At subscribing your name conclude with the same title you began with ; as, My Lord, your Lordship's, &c.

To either House of Parliament to Commissioners and Bodies Corporate.

To the Right Honourable the Lords Spiritual and Temporal in Parliament assembled.

To the Honourable the Knights, Citizens, and Burgesses, in Parliament assembled.

To the Right Honourable the Lords Commissioners of the Treasury ; or Admiralty.

To the Honourable the Commissioners of his Majesty's Customs ; Revenue of the Excise, &c.

To the Right Worshipful the Governors of Christ Hospital.

To the Master, Wardens, and Court of Assistants, of the Worshipful Company of Drapers.

A TABLE OF ABBREVIATIONS

NOW IN COMMON USE.

A. B. or B. A. Bachelor of Arts.	Id. idem, the same.
A. D. or Anno Domini, in the year of our Lord.	i. e. that is.
A. M. Ante Meridiem, before noon; Anno Mundi, or in the year of the world.	J. H. S. Jesus Hominum Salvator, Jesus the Saviour of Men.
A. M. Artium Magister, or Master of Arts.	Inst. Instant.
A. R. Anno Regni, or in the year of the reign.	L. L. D. Doctor of Laws.
B. D. Bachelor of Divinity.	M. A. Master of Arts.
Bart. Baronet.	M. B. Bachelor of Physic.
B. V. Blessed Virgin.	M. D. Doctor of Physic.
Cent. Centum, or hundred.	MS. Manuscript.
Cl. Clericus, or clerk.	MSS. Manuscripts.
Co. Company.	N. B. Nota bene, mark well.
Cr. Creditor.	N. S. New Style.
C. C. C. Corpus Christi College.	O. S. Old Style.
C. S. Custos Sigilli, Keeper of the Seal.	Per, by.
C. P. S. Custos Privati Sigilli, Keeper of the Privy Seal.	Per cent. by the hundred.
Dr. Doctor, or debtor.	P. M. Post Meridiem, afternoon.
Do. Ditto, or the same.	P. S. Postscript.
D. Denarii, or pence.	Q. Question, or query.
D. D. Doctor of Divinity.	Reg. Prof. Regius Professor, or King's Profes. or.
F. R. S. Frater Regalis Societatis, Fellow of the Royal Society.	Rt. Hon. Right Honourable
Ibid. ibidem, in the same place.	S. A. Secundum Artem, according to art.
	St. Saint.
	S. T. P. Sanctæ Theologiæ Professor, Professor of Divinity.
	Vide, see.
	Viz. that is to say.
	Xtian. Christian.
	Xt. Christ.

THE
YOUNG MAN'S COMPANION,
YOUTH'S INSTRUCTOR.

PART III.
ARITHMETIC.

ARITHMETIC.

ARITHMETIC is a science which explains the properties of numbers, and shews the method or art of computing by them.

• We have very little information respecting its origin and invention; history neither fixes the author of it, nor the time of its discovery. Some imagine, that it must have taken its rise from the introduction of commerce, and ascribe its invention to the Tyrians. That, however, it had a much earlier introduction into the world, even before the deluge we may gather from the following expression in the prophecy of Enoch, as mentioned by Jude: "Behold the Lord cometh with ten thousand of his saints." This shows that even at that time men had ideas of very high numbers, and computed them also in the same manner that we do, namely by tens. The directions also given to Noah, concerning the dimensions of the ark, leave us no room to doubt that he had a knowledge of numbers, and likewise of measures. When Rebecca was sent away to Isaac, Abraham's son, her relations wished that she might be the mother of thousands of millions; and if they had been totally unacquainted with the rule of multiplication, it is impossible to conceive that they could have formed such a wish. It appears therefore certain, that the four fundamental rules of arithmetic were known in some nations, in very early ages of the world; though at what time they were discovered or invented cannot now be exactly ascertained.

The Greeks were the first European nation among whom arithmetic arrived at any degree of perfection, and they made use of the letters of the alphabet to represent their numbers. The Romans followed a like method, and, besides characters for each rank of classes, they introduced others for five, six, and seven, to denote the intermediate

still used for distinguishing the chapters of books and some other purposes. From the Romans arithmetic came to us ; but the common arithmetic among us, which makes use of the ten figures, was utterly unknown to the Greeks and Romans, and came into Europe from the Arabians by way of Spain. The Arabians are said to have received them from the Indians. This most perfect method of supputation is supposed to have taken its origin from the ten fingers of the hand, which were made use of in computations before arithmetic was brought into an art. The eastern missionaries assure us, that to this day the Indians are very expert at computing on their fingers without any use of pen or ink. And the natives of Peru in South America, who do all by the different arrangement of grains of maize, are said to excel any European, both for certainty and dispatch, with all his rules.

Arithmetic has five principal rules, namely, NUMERATION or NOTATION, ADDITION, SUBTRACTION, MULTIPLICATION, and DIVISION ; and these are the foundation of all arithmetical operations.

NUMERATION.

NUMERATION, or NOTATION is the art of expressing properly and methodically any proposed number by figures.

The whole series are thus described :

1,	2,	3,	4,	5,	6,	7,	8,	9.
One,	two,	three,	four,	five,	six,	seven,	eight,	nine.

Another character, formed by the letter 0, is called a *cipher*, signifying, when alone, nothing, but when joined to another figure it adds tenfold to its original value, thus :

10,	20,	30,	40,	50,	60,	70,	80,	90.
Ten,	twenty,	thirty,	forty,	fifty,	sixty,	seventy,	eighty,	ninety.

Other ciphers added still increase it tenfold, thus :

100,	1000,	200,000,	1,000,000
One hundred,	one thousand,	2 hundred thousand,	one million.

The value of any number may be known by learning the following Table, which must be read from right to left, beginning with No. 1, calling it units.

1	9	9	8	7	6	5	4	3	2	1
tens of thousands.	thousands of millions.	hundreds of millions.	tens of millions.	millions.	hundreds of hundreds.	tens of hundreds.	hundreds.	hundreds.	ms.	its

The figures together in one sum, thus, 10,987,654,321, would read or be called as follows, ten thousand, nine hundred eighty-seven millions, six hundred fifty-four thousand, three hundred and twenty-one.

The Roman figures, called numerals, are

I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	L.	C.	D.	M.
1,	2,	3,	4,	5,	6,	7,	8,	9,	10,	50,	100,	500,	1000.

APPLICATION.

The building of Rome took place seven hundred and fifty three years before Christ; the computation of years from the birth of Christ did not begin to be used in history till the year seven hundred and forty eight; the current year of the Christian era is one thousand eight hundred and fourteen. Write down in figures the above several number of years.—*Answer*, 753, 748, 1814.

It has been remarked, that the planets perform their revolutions with so much exactness, as never once to fail: but, for almost 6000 years, come constantly about to the same period, without the difference of the hundredth part of a minute.

Mercury is said to be about 37,000,000 of miles from the Sun; Venus 68,000,000; the Earth 95,000,000; Mars 145,000,000; Jupiter 495,000,000; and the Georgium Sidus 1,800,000,000. Write down in words the above several figures.

Answer, Mercury, thirty-seven millions; Venus, sixty-eight millions; the Earth, ninety-five millions; Mars, one hundred and forty-five millions; Jupiter, four hundred and ninety-five millions; and the Georgium Sidus, eighteen hundred millions.

ADDITION.

ADDITION teaches to collect two or more given numbers into one, and to express the amount correctly. It is either *simple* or *compound*; simple when it relates only to figures, and compound when those figures have a reference to *Money, Weights, Measures, &c.* Thus in *simple addition* the following examples will serve as specimens.

EXAMPLES.

No. 1.	No. 2.	No. 3.	No. 4.	No. 5.
13	247	4379	5674321	10
47	358	5643	4210	100
59	421	7524	34765	1000
30	650	6000	21	4000
47	700	4760	761	20
196	2376	28306	5714078	5130

In casting up these sums begin with the column of units on the right. Thus, in No. 1, say 7 and 9 are 16, and 7 are 23, and 3 are 26;—then as there are 6 units and two tens over, place the 6 under the column of units, and carry 2 to that of the tens, and proceed thus; 2 and 4 are 6, and 3 are 9, and 5 are 14, and 4 are 18, and 1 are 19; which being the whole, place the 9 under the column of tens, it being 9 tens; and the 1 being 100 place next to it on the left. Thus the whole will be one hundred and ninety-six. This general rule will serve for all the others, carrying all the tens in one column to the next throughout the whole.

In order to prove any sum in addition, cast it up again the reverse way, namely, from the top to the bottom.

COMPOUND ADDITION

MONEY.

BEFORE the learner proceeds in this part of Arithmetic, it is absolutely necessary to learn perfectly the following Tables.—Note, a farthing, being one fourth of a penny, is written thus, $\frac{1}{4}$; a halfpenny thus, $\frac{1}{2}$; three farthings thus, $\frac{3}{4}$.

Table.

4 farthings make	- -	1 penny
12 pence	- - -	1 shilling
20 shillings	- - -	1 pound

Table.

PENCE.		SHILLINGS.		PENCE.
20	are	1	and	8
30	-	2	-	6
40	-	3	-	4
50	-	4	-	2
60	-	5	-	0
70	-	5	-	10
80	-	6	-	8
90	-	7	-	6
100	-	8	-	4
110	-	9	-	2
120	-	10	-	0
130	-	10	-	10
140	-	11	-	8
150	-	12	-	6
160	-	13	-	4
170	-	14	-	2
180	-	15	-	0
190	-	15	-	10
200	-	16	-	

EXAMPLES.

Note, the column with an £. signifies Pounds, s. Shillings, and d. Pence.

No. 1.		No. 2.		No. 3.			No. 4.			
s.	d.	s.	d.	£.	s.	d.	£.	s.	d.	
0	4½	0	3	1	2	4	32	4	7	
0	3½	2	7	0	3	6	653	2	6½	
0	7½	3	4	6	7	9	475	7	2	
0	5	2	7	1	4	2	45	6	7	
0	6½	15	9	5	3	4	2	3	2½	
<hr/>		<hr/>		<hr/>			<hr/>			
2	2½	£1	4	6	14	1	1	1208	4	1
<hr/>		<hr/>		<hr/>			<hr/>			

Thus, in the first example, begin with the farthings, and say:---1 and 3 are 4, and 2 are 6, and 1 are 7; which being 1 penny and 3 farthings write ½ underneath, and

carry 1 to the pence: then 1 and 6 are 7, and 5 are 12, and 7 are 19, and 3 are 22, and 4 are 26; then 26 pence being 2 shillings and twopence over, place 2 under the column of pence and 2 under that of shillings; the whole sum making, two shillings and twopence three farthings.

The other examples must be performed in the same manner, taking care to carry one pound for every 20 shillings, and one for every 10 in the pounds, as in simple addition.

AVOIRDUPOIS WEIGHT.

By this weight are weighed all kinds of grocery goods or wares; as tobacco, sugars, fruit, and drugs; as also meat, butter, cheese, alum, tallow, iron, brass, copper, lead, tin, pewter, pitch, tar, resin, hemp, flax, soap, salt, &c.

Tables.

	4	quarters	make	1	dram,	marked	<i>dr.</i>
	16	drams	1	ounce	-	-	<i>oz.</i>
Ans	16	ounces	1	pound	-	-	<i>lb.</i>
	28	pounds	1	quarter	of	a	
		weight	-	-	-	-	<i>qr.</i>
	4	quarters	1	hundred	weight	-	<i>C.</i>
	20	hundred	weight	1	ton	-	<i>T.</i>

EXAMPLES.

No. 1.	No. 2.	No. 3.	No. 4.
<i>C. qr. lb.</i>	<i>C. qr. lb.</i>	<i>C. qr. lb.</i>	<i>lb. oz. dr.</i>
5 1 16	24 2 12	9 1 16	21 11 12
4 2 24	42 2 0	4 3 26	42 14 15
6 3 6	16 1 12	7 1 0	64 10 11
7 1 12	25 3 24	5 3 27	29 9 10
9 0 20	19 0 20	1 3 2	16 12 13
6 2 0	26 1 22	2 2 2	27 13 14
<hr/>	<hr/>	<hr/>	<hr/>
39 3 29	155 0 6	34 3 17	206 9 11
<hr/>	<hr/>	<hr/>	<hr/>

In the first example, the column of pounds, when added up, makes 78, which contains two 28's, and 22 over

therefore set down 22 under the column of pounds, and carry 2 to the column of quarters, and so on.

TROY WEIGHT.

By this weight are weighed jewels, gold, silver, pearls, and the usual denominations are pounds, ounces, pennyweights, and grains, as in the following table.

Table.

24 grains make	- - -	1 pennyweight
20 pennyweights	- -	1 ounce
12 ounces	- - -	1 pound

EXAMPLES.

No. 1.				No. 2.				No. 3.			
lb.	oz.	dwt.	gr.	lb.	oz.	dwt.	gr.	oz.	dwt.	gr.	
4	5	12	10	14	6	10	11	204	10	14	
5	4	16	17	24	10	11	12	96	7	17	
3	11	19	20	21	6	4	17	100	11	12	
4	6	7	12	22	10	12	14	56	10	20	
5	1	11	12	16	11	12	13	212	10	23	
4	11	12	13	22	7	6	17	96	19	12	
<hr/>				<hr/>				<hr/>			
28	6	0	12	123	4	18	12	767	17	2	
<hr/>				<hr/>				<hr/>			

Note, that 1lb. 2 oz. 12 dwts. troy is equal to a pound avoirdupois; and a pound troy is about 13 oz. 2½ dr. avoirdupois.

TABLES.

Apothecaries' Weight.

20 grains make	- - - - -	1 scruple
3 scruples	- - - - -	1 dram
8 drams	- - - - -	1 ounce
12 ounces	- - - - -	1 pound

By these weights Apothecaries compound their medicines; they buy and sell their drugs by avoirdupois weight.

Cloth Measure.

4 nails or 9 inches—1 qr. of a yard
 4 qr. or 36 inches—1 yard
 5 qr. or 45 inches—1 ell English
 3 qr. or 27 inches—1 ell Flemish
 6 qr. or 54 inches—1 ell French

Wool Weight.

7 lb. make 1 clove	2 weys or 364 lb. 1 sack
2 cloves or 14 lb. 1 stone	12 sacks or 4368 lb. 1 last
2 stones or 28 lb. 1 todd	240 lb. 1 pack of wool
6½ todDs or 182 lb. 1 wey	

Wine Measure.

2 pints 1 quart	84 gallons, 1 puncheon
4 quarts 1 gallon	2 hogsheads 1 pipe or butt
42 gallons 1 tierce	2 pipes, or 252 gallons, 1 tun
63 gallons 1 hogshead	

Sweet oil has 236 gallons to the tun, but oil from Greenland has 352 gallons to the tun.

The wine gallon contains 231 cubic or solid inches, by which all liquids are measured, except beer and ale.

Beer Measure.

2 pints 1 quart	2 kilderkins, or 36 gallons, 1
4 quarts 1 gallon	barrel
9 gallons 1 firkin	1 barrel and a half, or 54
2 firkins 1 kilderkin	gallons, 1 hogshead

Ale Measure.

2 pints 1 quart	2 kilderkins, or 32 gallons, 1
4 quarts 1 gallon	barrel
8 gallons 1 firkin	1 barrel and a half, or 48
2 firkins 1 kilderkin	gallons, 1 hogshead

A gallon of beer or ale contains 282 solid inches.

A firkin of soap or herrines is the same as that of ale.

Dry Measure.

2 pints 1 quart	4 bushels 1 comb or half
2 quarts 1 pottle	quarter
2 pottles 1 gallon	2 combs 1 quarter
2 gallons 1 peck	4 quarters 1 chaldron
4 pecks 1 bushel land measure	5 quarters 1 wey
4 pecks 1 bushel watermeasure	2 weys, or 10 quarters, 1 last

By this measure corn, salt, and other dry goods are measured.

Sea Coal Measure.

5 pecks 1 bushel	12 sacks 1 chaldron
3 bushels 1 sack	21 chaldron 1 score

The standard bushel is 18 $\frac{1}{2}$ inches wide, and 8 inches deep.

Long Measure.

3 barley-corns 1 inch	6 feet, or 2 yards, 1 fathom
12 inches 1 foot	40 poles, or 220 yards, 1
3 feet 1 yard	furlong
5 feet 1 geometrical pace	8 furlongs, or 1760 yards,
5 yards and a half 1 pole	1 mile
perch, or rood	3 miles 1 league

In a mile are 8 furlongs, 320 poles, 1760 yards, 5280 feet, 63,360 inches, 190,080 barley-corns.

Land Measure.

5 $\frac{1}{2}$ yards 1 pole, perch, or rood
40 poles 1 furlong, or quarter of an acre
160 poles in length and 1 in breadth, 1 acre
80 poles in length and 2 in breadth, 1 acre
40 poles in length and 4 in breadth, 1 acre
4 poles in length 1 chain
10 chains in length and 1 in breadth, 1 acre

Time.

60 seconds 1 minute	4 weeks 1 month
60 minutes 1 hour	13 months, 1 day, and 6
24 hours 1 day	hours, 1 Julian year
7 days 1 week	

In a year are 365 days 6 hours, 8766 hours, 525,960 minutes, 31,557,600 seconds.

The solar year is divided into 12 calendar months, which contain 365 days and to know how many days are in each, observe attentively the following lines,

Thirty days hath September,
 April, June, and November;
 February hath twenty-eight alone,
 And all the rest have thirty-one.
 Except when Leap-year doth combine,
 Then February's days are twenty-nine.

- -

APPLICATION.

According to most chronologers the world was created 4004 years before Christ; how old is it this present year, 1814?—*Answer*, 5818 years.

The inhabitants of our earth, excepting Noah and his family, were destroyed for their wickedness by a flood. This direful event is described in the 6th, 7th, and 8th chapters of Genesis; Noah being, as the sacred historian relates, “a just man and perfect in his generation, found grace in the eyes of the Lord,” and was preserved in the ark, as were also his family, and a certain number of beasts and birds to replenish the earth.

The Deluge happened 2356 years before Christ how long is that ago, this present year, 1814?

Answer, 4170 years.

ST. PAUL'S Cathedral cost £800,000; the Royal Exchange £80,000; the Mansion House £40,000; Black Friar's Bridge £152,810; Westminster Bridge £389,000; and the Monument £13,000; what is the amount of these sums?

Answer, £1,474,810.

A person owes to A £100, to B £240. 10s. to C £784. 12s. 6d. to D £779, to E £25. 4s. 7d. and to F £19. 19s. 6d. what do his debts amount to? *Answer*, £1670. 6s. 7d.

A factor bought 4 bags of hops; No. 1, weighed 2 C. 1 qr. 14 lb.; No. 2, 3 qr. 17 lb.; No. 3, 2 C. 3 qr. 13 lb.; and No. 4, 1 qr. 27 lb. What is the weight of all?

Answer, 6 C. 2 qr. 15 lb.

SUBTRACTION.

THIS rule teaches the art of taking one number from another in order to find what remains.

Place the lesser number under the greater, draw a line under them, and, beginning at the right hand, take each figure in the lower line from the figure under which it stands; but if the figure in the lower line is greater than that in the upper, then, in numbers of one denomination, ten must be borrowed and added to the figure in the upper line; then take the figure in the lower line from the sum, and write down the remainder, but for every ten thus borrowed, one must be paid or added to the next left-hand figure in the lower line.

EXAMPLES.

No. 1.	No. 2.	No. 3.	No. 4.
<i>From</i> 9876	45321	29873541	92438627
<i>Take</i> 367	34510	19795428	84569738
<i>Rem.</i> 9509	10811	10078113	7868889

In the example, No. 1, say, 7 from 6 I cannot, but 7 from 16 (borrowing 10, as before observed) and there remains 9, which you set down. Then say, 1 that I borrowed and 6 are 7; 7 from 7 and there remains 0; 3 from 8 and there remains 5; nothing from 9 and there remains 9. In order to prove it, work the two last sums by addition, thus:

$$\begin{array}{r} 367 \\ 9509 \\ \hline 9876 \end{array}$$

The other sums are worked and proved in the same manner.

COMPOUND SUBTRACTION.

COMPOUND SUBTRACTION teaches to find the difference between any two sums of divers denominations, it is to be performed as in simple numbers, except that, instead of borrowing 10, you must borrow so many of that denomination you are subtracting as will make 1 of the next; as, for instance, in pence you borrow 12, in shillings 20, &c

MONEY.

EXAMPLES.

No. 1.			No. 2.			No. 3.		
£.	s.	d.	£.	s.	d.	£.	s.	d.
23	6	4	23	6	7	174	16	6
12	3	2	25	12	9	97	12	4
<hr/>			<hr/>			<hr/>		
11	3	11	397	13	10	77	4	11
<hr/>			<hr/>			<hr/>		

is, in No. 2, say 9 from 7 I cannot, but 9 from 19 (borrowing 12 and there remains 10: 1 that I borrowed and 12 are 13: 13 from 6 I cannot, but 13 from 26 (borrowing 20) and there remains 13; 1 that I borrowed and 5 are 6; 6 from 3 I cannot, but 6 from 13 (borrowing 10) and there remains 7: 1 that I borrowed and 2 are 3, 3 from 2 I cannot, but 3 from 12, and there remains 9: 1 that I borrowed from 4, and there remains 3. Prove it as before by addition.

AVOIRDUPOIS WEIGHT.

T.	C.	qr.	lb.	C.	qr.	lb.	lb.	oz.	dr.
44	12	1	10	246	2	12	246	2	10
39	14	2	6	164	3	22	97	10	12
<hr/>				<hr/>			<hr/>		
4	17	3	4	81	2	18	48	7	14
<hr/>				<hr/>			<hr/>		

TROY WEIGHT.

lb.	oz.	dwt.	gr.	lb.	oz.	dwt.	gr.	oz.	dwt.	gr.
16	3	2	1	462	4	10	11	1247	10	13
14	5	1	1	196	9	6	16	975	16	17
<hr/>				<hr/>				<hr/>		
1	10	1	0	265	7	3	19	271	13	20
<hr/>				<hr/>				<hr/>		

APPLICATION.

RUSNYMEDE, a place between Staines and Windsor, is revered by every son of liberty, as the spot where the liberties of Englishmen received a solemn confirmation. There the tyrant King John, "pressed by a band of noble patriots," was compelled to sign the famous charter, which is now, by way of pre-eminence, called **MAGNA CHARTA**, and has generally been considered as the bulwark of English liberty. "To make assurance doubly sure," the ratification of this charter has been reiterated no less than thirty several times.

This celebrated charter was wrested from John in 1215. How long has that happy event preceded 1814?

Answer, 599 years.

Richard I. of England defeated the French at Gisors in the department of Eure, and late province of Normandy, France, A. D. 1198. That monarch's parole for the day, was "*Dieu et mon droit*, God and my right," which has almost ever since continued the motto of the royal arms of England. How many years have intervened between that victory and the present year, 1814?—*Answer, 616 years.*

The brave Prince of Orange, afterwards William III. landed at Torbay, in Devonshire, in 1688. He was invited over to England, to protect the country from the tyrannical oppressions of James II. This interesting event has been styled in the British history, the **GLORIOUS REVOLUTION**, and King William is much celebrated for his share in the transaction.

Among the principal promoters of the Revolution were the Earls of Devonshire and Daubey, with the Lord Delaquer. They met privately at Whittington, a village on the edge of Scarsdale, in Derbyshire; and the house in which they assembled has ever since been denominated the **Revolution-House**.

By the exclusion of King James, and the subsequent transactions, particularly the ratification of the Bill of Rights, the rights of the inhabitants of Britain were more clearly ascertained, and better established, than at any preceding period. "By the Revolution future English monarchs were instructed, that government was not instituted for the benefit of the prince, but of the people; that he is accountable to them for the execution of the trust which they have reposed in him; that opposition to tyranny is not only defensible, but meritorious; and that the welfare

and dignity of a nation depend upon their firm and intrepid adherence to the great principles of public freedom, of just and equal liberty.

The Revolution took place in 1688; how long is that ago this present year, 1814?—*Answer*, 126 years.

Suppose the effects of a bankrupt amount to £500, and he owes to A £300. 19s. 6d. to B £519. 7s. 6d. to C £218. 14s. 5d, and to D £25. 10s. what is the deficiency?

Answer, £564. 11s. 5d.

Suppose a merchant commencing business with £10,000, gains £1,099. 15s. 6d. in the course of a year, and at the expiration of that period distributes in charity the sum of £114. 16s. 4d. what is the balance remaining in hand?

Answer, £10,984. 19s. 2d.

POST-CHAISES were invented by the French, and, according to Mr. Granger, introduced into England by Mr. William Tull, son of the well known writer on husbandry. A sort of light open chaise, chariot, or calash, was however in use among the Romans, and said to have been invented by the Emperor Augustus, or Trajan.

If a post-chaise and pair of horses cost £120. 10s. and the latter be valued at £52. 12s. what is the price of the chaise?—*Answer*, £67. 18s.

MULTIPLICATION.

THIS, for general purposes, is the most useful rule in Arithmetic, as it performs the work of many additions; and therefore particular attention should be paid to the following Table, which must be learned completely by heart before any thing can be done by the pupil to advantage.

In order to understand this table the learner must multiply each figure of the first column by those of the upper row, looking for the product in that square which is in a line with the one, and underneath the other. Thus if the pupil wants to find the value of 6, multiplied by 5, by looking on the line where the 5 is placed in the first column, under the 6 in the top line, the product will be found to be 30. The way thereof to learn this table, which must be done correctly, is to go on thus; twice 1 are 2, twice 3 are 6, twice 4 are 8, twice 5 are 10, and so on through the whole.

PART III *or Youth's Instructor.*

THE MULTIPLICATION TABLE.

1	2	3	4	5	6	7	8	9	10	11	12
2	4	6	8	10	12	14	16	18	20	22	24
3	6	9	12	15	18	21	24	27	30	33	36
4	8	12	16	20	24	28	32	36	40	44	48
5	10	15	20	25	30	35	40	45	50	55	60
6	12	18	24	30	36	42	48	54	60	66	72
7	14	21	28	35	42	49	56	63	70	77	84
8	16	24	32	40	48	56	64	72	80	88	96
9	18	27	36	45	54	63	72	81	90	99	108
10	20	30	40	50	60	70	80	90	100	110	120
11	22	33	44	55	66	77	88	99	110	121	132
12	24	36	48	60	72	84	96	108	120	132	144

In multiplication observe these three terms, multiplicand, multiplier, product.

1. The multiplicand (generally the greater of the two numbers) is the number to be multiplied.

2. The multiplier (generally the lesser of the two numbers) is the number to multiply with.

3. The product is the result of the work, or the answer to the question.

EXAMPLES.

	No. 1.	No. 2.	No. 3.
<i>Multiplicand</i>	365	543813	7543852
<i>Multiplier</i>	5	9	6
<i>Product</i>	<u>1825</u>	<u>4894317</u>	<u>45263112</u>

In No. 1 of the foregoing examples say, 5 times 5 are 25, then write 5 and carry 2 to the next, saying 5 times 6

are 30, and 2 are 32 ; write 2 and carry 3, saying 5 times 3 are 15 and 3 are 18 ; therefore 365 multiplied by 5 makes 1825

EXAMPLES.		
No. 4.	No. 5.	No. 6.
<i>Multiplicand</i> 5420	527527	275827
<i>Multiplier</i> 24	285	19725
21680	2637635	1379135
10840	4220216	561654
	1055054	1930789
<i>Product</i> 130080	150345196	2482443
		275827
		5440687575

In No. 4. the multiplier being two figures, namely 24; begin with the 4 and go through the whole of the sum to be multiplied, as in No. 1. Then with the 2 in like manner, only observing to put the product of the first figure under the multiplying figure, as in the example, and multiply on as before ; when both are performed, the rule of addition must be applied to ascertain the whole product, as both are to be added, and the amount will be the sum required.

When ciphers are intermixed with figures in the multiplier, then multiply the figures as above ; and when you come to a cipher in the multiplier, set down another cipher exactly and perpendicularly under it ; then begin the multiplicand again with the next figure to the cipher in the multiplier, and go through it in the same line, placing the first figure of that product next the cipher, towards the left hand.

EXAMPLES		
No. 1.	No. 2.	No. 3.
24393	784371	327586
402	23604	6030
48786	3137484	9827580
975720	47062260	19655160
	2353113	
9805986	1568742	1975343580
	18514293084	

When either the multiplier or the multiplicand, or both, contains ciphers on the right hand, set down so many ciphers as there are in both, on the right of the product; and multiply only by the remainder, thus :

EXAMPLES.

No. 1.

2405

100



240500

No. 2.

576

2400

230400

1152

1382400

No. 3.

876500

24300

26295

35060

17530

21298950000

COMPOUND MULTIPLICATION.

MULTIPLICATION of money has great affinity to addition of money; the same method being taken in carrying from one denomination to the next, namely, from farthings to pence, from pence to shillings, and from shillings to pounds.

EXAMPLES.

No. 1.

£. s. d.

Multiply 7 12 6
by 6

45 15 0

No. 2.

£. s. d.

8 13 4
9

78 0 0

No. 3.

£. s. d.

15 5 4
12

83 4 0

Here, in No. 1. say 6 times 6 are 36 pence, which are just 3s. Set down 0 in the place of pence, and carry 3 to the place of shillings (exactly the same as in addition of money;) then 6 times 12 are 72, and 3 are 75 or £3. 15s; set down 15 in the place of shillings, and carry 3 to the pounds; then 6 times 7 are 42, and 3 are 45. So the whole amount is £45. 15s.

When the given quantity exceeds 12, and is such a number that any two numbers in the multiplication table being multiplied together will produce it, multiply the given sum by one of these numbers and the product by the other.

EXAMPLES.

No. 1.		No. 2.	
30 ells of holland,		45 pounds of raw silk,	
at 3s. 7d. per ell.		at 15s. 4d. per lb	
<i>Multiply by</i>	10		5
	<hr/>		<hr/>
	1 15 10		3 16 8
<i>and</i>	3		9
	<hr/>		<hr/>
	£5 7 6		£34 10 0
	<hr/>		<hr/>

When the given quantity cannot be produced by the multiplication of two small numbers, find the two figures which come the nearest to it, and multiply by them as before; then multiply the original sum by whatever number remains, and add it to the last product, and the total will be the answer.

EXAMPLES.

No. 1.		No. 2.	
79 Cwt. of cheese,		113 Cwt. of hops,	
at £1. 8s. (by 2)		at £4. 10s. 6d. (by 3)	
<i>Multiply by</i>	7		10
	<hr/>		<hr/>
	9 16		45 5 0
<i>and</i>	11		11
	<hr/>		<hr/>
	107 16		497 15 0
	2 16		13 11 6
	<hr/>		<hr/>
	£110 12		£511 6 6
	<hr/>		<hr/>

In order to prove Multiplication in all its branches, recourse must be had to Division, but before that is known simple numbers may be proved by exchanging the multiplier for the multiplicand, and if the product be the same the work is right.

APPLICATION.

CORK is the bark of a tree of the same name, a species of the oak. It grows in great abundance on the Pyrenean mountains and in other parts of Spain, in France, and in the north of New England. The Egyptians made coffins of cork, which being lined with a resinous composition, pre-

served dead bodies uncorrupted. But the chief employ of cork is to put in shoes, slippers, &c. and particularly to stop bottles.

What are five gross of corks worth at 3s. 9½d. per gross?
Answer, 19s. 0½d.

COTTON is a plant or shrub of which there are several varieties, and not a few distinct species, propagated in the gardens of the curious among us.

The common sort is the herby or shrubby cotton, which is cultivated very plentifully in Candia, Lemnos, Cyprus, Malta, Sicily, Naples, and also between Jerusalem, and Damascus, whence the cotton is brought annually into these northern parts of Europe. It is sown on ploughed lands in spring, and cut down as our corn in harvest time, being an annual plant.

The cotton is the wool which encloses or wraps up the seeds, and is contained in a kind of brown husk or seed-vessel, growing upon this shrub. It is from this sort that the vast quantities of cotton are taken that furnish our parts of the world. One very fine sort of cotton is a native of the East and West Indies; and there are two sorts of cotton trees which grow in Egypt, and often arrive to great size.

Cotton makes a very considerable article of commerce; being used for various purposes, and furnishing various cloths, muslins, calicoes, dimities, and hangings; besides that it is frequently joined with silk and flax, in the composition of other stuffs.

What are 80 pounds of cotton worth at 2s. 8½d. per pound?—*Answer, £10. 16s. 8d.*

MUSK is a dry, light, and friable substance, of a dark blackish colour, feeling somewhat smooth, or unctuous. Its smell is highly perfumed, and too strong to be agreeable in any large quantity; on which account it is moderated by the mixture of some other perfume. It is brought from the East Indies, chiefly from the kingdom of Bantam in the island of Java, some from Tonquin and China, but that in most esteem comes from the kingdom of Tibet. The animal which produces it is of a very singular kind, not agreeing with any established genus: it is of the size of a common goat, but taller. The bag which contains the musk is situate under the creature's belly, and about the bigness of a hen's egg. These animals inhabit the woods and forests, where the native hunts them down.

Musk is of considerable use among the perfumers and confectioners; and is also employed medicinally in spasmodic disorders, fevers, &c. and particularly in convulsive complaints. The effects of musk are ease from pain, quiet sleep, and a copious diaphoresis. It does not, like opium, leave behind it any stupor or languidness.

What are 95½ ounces of musk worth at £2. 2s. 3d. per ounce?—*Answer*, £201. 14s. 10½d.

WATCHES were invented in the seventeenth century, and the glory of this excellent discovery lies between Dr. Hooke and Mr. Huygens, but to which of them it properly belongs has been much disputed; the English ascribing it to the former; and the Dutch, French, &c. to the latter. Dr. Derham, in his *Artificial Clock-maker*, says expressly that Dr. Hooke was the inventor; and he appears certainly to have been the inventor of what is called the pendulum watch. The time of this invention was about the year 1658, as appears, among other evidences, from an inscription on one of the double balance watches, presented to King Charles II. viz. Rob. Hooke inven. 1658. T. Tompion fecit, 1675. The invention presently got into reputation, both at home and abroad; and two of them were sent for by the Dauphin of France. Hume, however, in his *History of England*, asserts, that pocket watches were first brought into England from Germany, about the year 1577, having been invented at Nuremberg.

What are 549 common silver watches worth at £4. 18s. 6d. per watch?—*Answer*, £2703. 16s. 6d.

DIVISION.

As Multiplication teaches the art of finding any number when repeated so many times, so Division instructs us how often one given number is contained in another.

In this rule we are to take particular notice of the following terms:

1. The dividend, or number to be divided.
2. The divisor, or number by which it is divided.
3. The quotient, or answer to the work, which shews how often the divisor is contained in the dividend.

4. The remainder ; which is an uncertain branch of this rule, because there is sometimes a remainder, and sometimes not.

EXAMPLES.

No. 1. Dividend	No. 2.	No. 3.
Divisor 4)78906(2 Rem.	5)34567(2	12)76677246(6
Quotient $\overline{19726}$ 4	$\overline{6913}$ 5	$\overline{6389770}$ 12
Proof $\overline{78906}$	$\overline{34567}$	$\overline{76677246}$

In the first of these examples say, 4's in 7 once and 3 over, which considered as placed before 8, the next figure in the dividend, makes 38: then 4's in 38, 9 times and 2 over, which makes the next figure in the dividend 29: then 4's in 29, 7 times and 1 over, which makes 0, the next of the dividend, 10: 4's in 10 twice and 2 over, which makes 6, the last figure of the dividend, 26: lastly 4's in 26, 6 times; and the remainder is 2. In order to prove this or any other example multiply the quotient by the divisor, and take in the remainder in the first place, or place of units; and if the product be the same with the dividend, the division is right.

When the divisor exceeds 12, and is such a number that any two figures in the multiplication table, multiplied together will produce it, then the quotient may be found at two divisions in the same manner that the product may be found at two multiplications. But when the divisor consists of more figures than one, and cannot be thus produced, seek how many times it is contained in the same number of figures on the left hand of the dividend; and place the number thus obtained, at the right, as the first of the quotient (see example No. 1, in the following page) by which, multiply the divisor, and place the product under the said figures of the dividend, drawing a line underneath it; then subtract the product from the figures of the dividend, and to the remainder bring down another figure and proceed as before.

If the divisor be a larger amount than the same number of figures in the dividend take in the next figure, as in example No. 3, in the following page.

EXAMPLES.

No. 1. *Dividend*
Divisor 252)46242(183 *Quotient.*

252

2104

2016

882

756

Remainder 126

No. 2.
 342)48754(142

•342

1455

1368

84

084

190

No. 3.

568)4784871(8424

4544

2408

2272

1367

1136

2311

2272

39

In the example No. 1, after enquiry, you find it will not go twice, therefore set down 1 in the quotient, and place 252 under 462 of the dividend, and, after subtraction, the remainder is 210; to which bring down 4 from the dividend, and the sum is 2104; then seeking again, you find it will bear 8 times, which placed in the quotient, and the divisor 252 multiplied by it, the product is 2016, to be subtracted from 2104; which being done, the remainder is 88; to which 2, the last figure of the dividend, being brought down, it makes 882; then seeking again, you find it will go 3 times; and the product of the divisor multiplied by 3, is 756; which subtracted for 882, there is 126 from the true remainder.

When you have a cipher or ciphers in the divisor, separate them with a dash of the pen from the rest of the divisor, and also cut off as many figures or ciphers from the right of the dividend, as you cut off ciphers from the divisor; and divide the remaining figures towards the left hand,

by the remaining figures of the divisor : then, in order to find the true remainder, bring down the figure which was cut off in the dividend, and place it to the right of the lowest row of figures, as in the following example.

EXAMPLE.

$$16 \overline{) 10429512} 268$$

$$\begin{array}{r} 32 \\ \times 109 \\ \hline \end{array}$$

$$109$$

$$96$$

$$135$$

$$128$$

$$72$$

Here the cipher is cut off from the divisor, and 2 from the dividend ; work it according to the rule, and you will find the quotient 268, and the remainder 72.

Multiplication and Division will prove each other ; for in proving Multiplication, if you divide the product by the multiplier, the quotient will be the multiplicand ; or in proving Division, if you multiply the divisor by the quotient, the product will be the dividend.

COMPOUND DIVISION.

PLACE the divisor and dividend as in simple numbers, and proceed with the pounds in the same manner ; if there be any remainder bring it into shillings by multiplying by 20, and add that amount to the shillings in the dividend, if not, divide them without it ; and so by every denomination bringing each remainder, if any, into the succeeding denomination, and dividing as before.

EXAMPLES.

	No. 1.			No. 2.			No. 3.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.
Divisor	5)26	12	6	12)246	13	6	11)531	8	2
Quotient	5	6	6	20	11	14	48	6	24
			5			12			11
Proof.	26	12	6	246	13	6	531	8	2

In the foregoing example No. 1, say, 5's in 26, 5 times and 1 over, that is, 1 pound or 20 shillings, which, with the 12 in the place of shillings, make 32s.; then 5's in 32, 6 times, and there remains 2s. or 24d. which, with 6d. in the place of pence, make 30; then 5's in 30, 6 times.

When the divisor exceeds 12, and is such a number that no figures multiplied together will produce it, the work may be performed by two divisions thus:

EXAMPLES.

No. 1. Divide £463. 18s. 6d. into 18 equal parts.

$$\begin{array}{r} \text{£.} \quad \text{s.} \quad \text{d.} \\ 3 \overline{) 463} \quad 18 \quad 6 \end{array}$$

$$6 \overline{) 154} \quad 12 \quad 10$$

$$\text{Answer} \quad \text{£}25 \quad 15 \quad 5\frac{1}{2}$$

No. 2. If 84lb. of coffee cost £31. 10s. what will 1lb. cost?

$$\begin{array}{r} \text{£.} \quad \text{s.} \quad \text{d.} \\ 7 \overline{) 31} \quad 10 \quad 0 \end{array}$$

$$12 \overline{) 4} \quad 16 \quad 0$$

$$\text{Answer} \quad \text{7} \quad 6$$

By Division of Money, if you have the amount of several articles, you may know the price of one at the same rate as well as by the Rule of Three; see example No. 2: and as in Multiplication of Money you multiply the price by the quantity, so in Division of Money you divide the price by the quantity to obtain an answer:

APPLICATION.

MATHEMATICIANS have demonstrated, that light moves with such amazing rapidity, as to pass from the sun to our planet in about the space of eight minutes. Now, admitting the distance, as usually computed, to be 95,000,000 of English miles, at what rate per minute does it travel?

Answer, 11,875,000 miles.

LONGITUDE is the distance of a place from some first meridian, east or west, measured in degrees, and minutes (60 of which make a degree) on the equator, half the circumference of the globe, or 180 degrees. Longitude may also be reckoned by time: for the circumference of the earth being 360 degrees, and its diurnal revolution performed in 24 hours, it follows, that 1 hour of time is equal to 15 degrees of longitude; and so in proportion for any greater or less quantity: consequently, a place which has the sun 1, 2, or 3 hours before or after another place, must be situate 15, 30, or 45 degrees east or west of the meridian of such a place. Hence, dividing the longitude of any place by 15, will give the number of hours which that place has the sun before or after persons who live under the first meridian.

PETERSBURGH, the capital of the Russian empire, built by Peter the Great; and Constantinople, the chief city of the Ottoman Empire, rebuilt by Constantine the Great, are situated in about thirty degrees of eastern longitude from the meridian of London: what is the hour at those places when it is noon with us?

Answer, 2 o'clock in the afternoon.

CALCUTTA, a large and populous city, the capital of Bengal, and of all the British possessions in the East Indies, is situate on a branch of the Ganges, about 100 miles from the sea. It was taken by the Nabob Surajah Dowla, in 1756, when the English prisoners, in number 146, were driven in the evening into a place called the Black Hole prison, a cube of about eighteen feet, where, through the want of room, the exclusion of fresh air, and the heat of the climate, 123 of these hapless victims expired in extreme agonies the same night: an affecting scene, which is pathetically described in Smollett's History of England.

Calcutta being retaken by Admiral Watson and Colone Clive early in 1757, the Nabob was afterwards defeated, deposed, and put to death.

The eastern longitude of Calcutta is about 88½; what o'clock is it with the inhabitants when it is mid-day with us?—*Answer*, 54 minutes past 5 in the afternoon.

The circumference of our earth under the equator is 21,600 geographical, or 25,020 English miles; now this body turning on its axis in about 24 hours, at what rate an hour, English measure, are the inhabitants situate under the equator, carried from west to east by the rotation?

Answer, 1042½ miles.

The velocity of the parts of the earth near the equator greatly exceeds the rapidity of motion of the parts in latitudes approaching the poles, as will be evident by the bare inspection of a terrestrial globe. In the parallel of latitude in which London is situate, a degree of longitude is only about 37 geographical, or 42 English miles; consequently, the circumference of the globe in this parallel is but about 15,120 English miles. At what rate per hour are we carried by the earth's diurnal rotation?—*Answer* 630 miles.

The inimitable humour with which Shakespeare pourtrays “Hal’s” frolics, and “the fat knight’s prowess at Gad’s Hill, a few miles from Rochester, Kent, has immortalized that otherwise obscure spot. But the following incidents, the most singular perhaps on record, superadded, in 1676, no small degree of temporary notice to its long established celebrity.

One Nicks having committed a robbery there about four in the morning, and suspecting himself recognized by the party robbed, made for Gravesend, where he ferried over the Thames, and rode to York with such speed, that, as was attested by the chief magistrate at his trial, he appeared on a bowling green in that city, at eight o’clock the same evening; which circumstance, so credibly and solemnly vouched, occasioned his acquittal; the jury judging it morally impossible for *the same horse* to bear the same man so long a journey in 16 hours.

The distance is computed at 214 miles: supposing his horse to have rested on the road for the space of 2 hours, what was the average expedition of every other hour?

Answer, 15 miles $\frac{1}{4}$ $\frac{2}{3}$.

LOTTERY is a kind of public game at hazard, frequent in England, France, and Holland, in order to raise money for the service of the state, and appointed with us by act of parliament.

The Romans invented lotteries to enliven their Saturnalia. This festival, which was instituted in commemoration of the freedom and equality which prevailed on earth in the golden reign of Saturn, began by the distribution of tickets which gained some prize. Augustus appointed lotteries, which consisted of things of little value; but Nero established some for the people, in which 1000 tickets were distributed daily, and several of those who were favoured by fortune became rich by them. Heliogabalus invented

some lotteries of a very singular nature; the prizes were either of great value or of none at all; one gained a prize of six slaves, and another of six flies; some got valuable vases, and others vases of common earth. A lottery of this kind exhibited an excellent picture of the inequality with which fortune distributes her favours.

The first lottery in England of which we have any account, was drawn at the west door of St. Paul's Cathedral, in 1569, and consisted of 40,000 lots, at 40s. each. The prizes were plate, and the profits were to be applied towards repairing the havens of this kingdom. In 1612, King James, for the plantation of English colonies in Virginia, appointed a lottery at the place where the one just mentioned had been determined. The principal prize of this last was 4000 crowns in fair plate.

In the state lottery of the year 1787, one of the £20,000 prizes came to a club consisting of 35 clerks in the India House. To how much did the share of each amount?

Answer, £571. 8s. 6½d.

POSTS, in their present improved state, are of very modern invention; for, even in France, the first place of their adoption, they were, in 1619, still unprovided with a letter-office. The year 1635, during Charles the First's reign, presents the first regular establishment of the kind in England. A private person projected, in 1683, the useful conveyance of letters and small parcels, by the penny post, throughout London and its suburbs.

The ancients being destitute of the convenience of posts, were accustomed when they took a long journey, and were desirous of sending back any news with uncommon expedition, to take tame pigeons with them. When they thought proper to write to their friends, they let one of these birds loose, with letters fastened to its neck: the bird, once released, would never cease its flight till it arrived at its nest and young ones.

The custom of making pigeons the vehicles of postage still retains among the Turks, and in several eastern countries; and Tavernier observes, that at this day, the Consul of Alexandretta transmits diurnal intelligence by them to Aleppo.

The same winged messengers have been used by the Dutch in sieges. When Haerlem was reduced to the last extremity, and on the point of opening its gates to a base and barbarous enemy, a design was formed to relieve it;

and the intelligence, says Thuanus, was conveyed to the citizens by a letter which was tied under the wing of a pigeon.

Crows were also sometimes employed as letter-bearers; and Cecinna, a Roman knight in the interest of Pompey, and the particular friend of Cicero, used to bring up young swallows, and send them as messengers, to carry news to his friends.

It may be observed, that few institutions are replete with more advantages, or productive of more eventual consolation, than that of posts. Indeed, their utility, not to say necessity, in commercial concerns, is too obvious to admit of any doubt. The aids they administer in political transactions are little less apparent. But it is in the more confined and humble scenes of social life, that they dispense comfort, and diffuse joy, with a liberality which we seldom hear adequately acknowledged; although to them the absent parent, child, friend, and other endearing relatives, are repeatedly indebted, not only for the removal of anxiety, and solace of dejection, but often for the sole antidote to despondency.

The Cyclopædia states the annual gross amount of our foreign and inland post-offices, so far back as the year 1764, to be £432,048; what was the quarterly, monthly, and weekly income at that period!—*Answer*, £108, 012 quarterly, £36,004 monthly, £8,308. 12s. 3½d. weekly.

REDUCTION.

The design of this rule is to reduce money, weights, and measures into an amount of different denominations; as, for instance, pounds into shillings, pence or farthings; tons into cwt. qr. and lb. &c. It is not, properly speaking, a distinct rule in arithmetic, but rather the application of the two preceding ones; for all great names are brought into small by multiplication, and all small ones into great by division.

This rule is also of considerable use in ascertaining the comparative value of the coins of different countries, a few examples of which are subjoined.

No. 1.

EXAMPLES.

No. 2.

Of money ascending.

£. s. d.
 In 32 14 6 $\frac{3}{4}$ how many farthings.
 $\begin{array}{r} 20 \\ \hline 654 \end{array}$ shillings.
 $\begin{array}{r} 12 \\ \hline 7854 \end{array}$ pence.
 4
31419 answer.

Of money descending.

Proved thus:
 $\begin{array}{r} 4)31419 \text{ farthings.} \\ 12)7854-\frac{3}{4} \\ 2,0(65,4-6d. \\ 32-14s. \\ \hline \end{array}$
£32 14 6 $\frac{3}{4}$ answer.

In the first of these examples, begin to multiply by 20, because 20 shillings make one pound; but as it contains a cipher on the right hand, take the 4 from the 14 shillings, and set it down in its proper place; then multiply by the 2, saying twice 2 are 4 and 1 from the 14 which was left are 5, and twice 3 are 6: then multiply the 654 shillings by 12, because 12 pence make one shilling, adding the 6 from the pence to the first figure multiplied; and lastly multiply the 7854 pence by 4, because 4 farthings make one penny, adding the 3 farthings to the first figure multiplied.

In the second example, the sum is proved by division, which is the way to ascertain any similar sum: here you begin by dividing the 31419 farthings by 4, in order to bring them into pence, thus 4's in 31, 7 times, and 3 over; 4's in 34, 8 times, and 2 over; 4's in 21, 5 times, and 1 over; 4's in 19, 4 times, and 3 over, which are 3-4ths of a penny, and therefore you find that in 31419 farthings, are contained 7854 pence and 3 farthings; thus you proceed through the whole, dividing the pence by 12, to bring them into shillings, and the shillings by 20, to bring them into pounds, taking care to carry out the remainder, which must be brought down when the answer is given.

Note, That pounds may be brought into pence at once by multiplying by 240; or into farthings by multiplying by 960; and on the contrary, farthings and pence may be brought at once into pounds by dividing by the same numbers.

To reduce foreign or English coin into pounds sterling, multiply the given number of pieces, by the shillings, pence or farthings that are in one piece, and the product will be

accordingly of the same name, which bring into pounds sterling, by division, as before directed; see the following example No. 1.

In order to reduce sterling money into foreign coins, bring the given pounds sterling and the given coin into one name, either shillings, pence, or farthings, then divide one by the other and the quotient will be the answer, see example, No. 2.

EXAMPLES.

No. 1. Reduce 246 Venetian ducats into sterling money, at 52*d.* sterling per ducat.

$$\begin{array}{r}
 \text{Ducats.} \\
 246 \\
 52 \\
 \hline
 492 \\
 1230 \\
 \hline
 12)12792 \\
 \hline
 2|0)106|6 \\
 \hline
 \text{Answer } £53. 6s.
 \end{array}$$

No. 2. Reduce £53. 6*s.* sterling into ducats, at 52*d.* sterling per ducat.

$$\begin{array}{r}
 £. \quad s. \\
 53 \quad 6 \\
 20 \\
 \hline
 1066 \\
 12 \\
 \hline
 52)12792(246 \text{ ducats.} \\
 104 \\
 \hline
 239 \\
 208 \\
 \hline
 312 \\
 312 \\
 \hline
 \end{array}$$

It has already been stated that all great names are brought into small by multiplication, and all small ones into great

by division; and as this observation will apply to the reduction of all kinds of weights and measures, an example or two shall suffice without further directions.

EXAMPLES.

In 456 C. 3 gr. 27 lb. of copper how many pounds?

C.	gr.	lb.
456	3	27
	4	
<hr/>		
1827		
28		
<hr/>		
14623		
3656		

Answer 51183 lb.

In 47,964 grains how many pounds troy?

gr.	
24)47964	(1998 dwt.
24	
<hr/>	
239	dwt.
216	2 0)199 8
<hr/>	
236	12)99. 18 dwt.
216	
<hr/>	
204	lb. 8. 3 oz.
192	
<hr/>	
12	gr.
<hr/>	

Answer, 8lb. 3oz. 18dwt. 12gr.

APPLICATION.

HANDEL'S first Commemoration at Westminster Abbey, in 1784, is said to have yielded £12,746. How many crowns, half-crown, pence, and farthings, are in that sum?

Answer, 20,984 crowns; 101,968 half-crowns; 3,059,040 pence; 12,236 160 farthings

GEORGE VILLIERS, Duke of Buckingham, son of the Duke of Buckingham, who was assassinated by Felton, was a distinguished statesman, poet, and dramatic writer. He is, however, yet more famous for his vices and misfortunes. His morals were very licentious, though he sometimes performed generous actions, he lived viciously and extravagantly, squandered away almost the whole of his estate, and died in obscurity. This happened at an inn at Kirby-Moorside, in Yorkshire, in the year 1687 or 1688.

This nobleman's estates yielded him annually 48,000,000 farthings; what was his yearly income in pounds sterling?

Answer, £50,000.

The foot passage from the village of Hampton-Wick through Bushy Park (a royal demesne) to Kingston-upon-Thames, had been for many years shut up from the public. An honest Englishman, whose name was Timothy Bennett, aged 75 years, "unwilling" (as was his favourite expression) "to leave the world worse than he found it," consulted a lawyer upon the practicability of recovering this road, and the probable expense of a legal process. "I have seven hundred pounds," said this admirable person, "which I should be willing to bestow upon this attempt. It is all I have, and has been saved through a long course of honest industry." The lawyer informed him, that no such sum would be necessary to produce this effect: and Timothy determined accordingly to proceed with vigour in the prosecution of this public claim. In the mean time Lord Halifax, ranger of Bushy Park, was made acquainted with his intentions, and sent for him. "And who are you," said his lordship, "that have the assurance to meddle in this affair?" "My name, my lord, is Timothy Bennett, Shoemaker, of Hampton-Wick. I remember, an't please your lordship, to have seen, when I was a young man sitting at my work, the people cheerfully pass by my shop to Kingston market; but now, my lord, they are forced to go round about through a hot sandy road, ready to faint beneath their burdens, and I am unwilling to leave the world worse than I found it. This, my lord, I humbly represent, is the reason of my conduct." "Begone, you are an impertinent fellow," replied the lord. However upon mature reflection, his lordship, convinced of the equity of the claim, notwithstanding the advice of his friends to persist, beginning to compute the ignominy of defeat—*Lord Halifax, the Nobleman, nonsuited by Timothy Bennett, the Shoemaker,—and the improbability of success,*

desisted from his opposition, and opened the road ; which is enjoyed without molestation to this day.

How many guineas, pence, halfpence, and farthings, are in the venerable Mr. Timothy Bennett's fortune ;—*Answer*, 660 guineas, 14 shillings ; 168,000 pence ; 336,000 halfpence ; 672,000 farthings.

WESTMINSTER BRIDGE is reckoned one of the most complete and elegant structure of the kind in the known world. It was begun in 1738, and finished 1750, at the expense of £218,800, defrayed by the parliament.

BLACK FRIAR'S BRIDGE is also a very fine bridge, and its architecture has been spoken of in terms of high commendation. It commands a fine view of the Thames, and discovers the majesty of St. Paul's in a very striking manner. It was begun in 1760, and completed in 10 years and three quarters, at the expense of £152,840 sterling, which was discharged by a toll upon the passengers.

How many farthings are in the amount of the sum expended in building the above-mentioned two bridges ; and how many half-crowns, sixpences, pence, and farthings, are in their difference ? —*Answer*, 356,774,400 farthings, in the whole ; 527,680 half-crowns, 2,638,400 sixpences, 15,830,400 pence ; and 63,321,600 farthings in the difference.

A COLOSSUS is a statue of enormous magnitude. In the temple of Belus, at Babylon, there was a golden statue forty feet high, which weighed 1000 Babylonish talents, and was worth three millions and a half of our money. There was an image erected on the plains of Dura, which, according to Daniel, was sixty cubits, or about ninety feet, in height. But the most celebrated Colossus of which any account is preserved, and which is therefore emphatically styled the *Colossus*, and deemed one of the wonders of the world, was a statue of brass, erected to the *Sun*, at the mouth of the harbour of Rhodes, a city in an island of the same name, in the Mediterranean Sea. It was 105 feet high, and proportioned in all its parts ; and according to the general opinion, the ships of that period passed between its legs.

Chares, of Lindus, devoted 12 years to the completion of the work, which occurred 288 years B. C. Sixty-six years subsequent to its erection, an earthquake overthrew it, and it lay neglected 894 years, that is, till the year of our Lord 672 ; when Moarvias, the sixth caliph, or emperor of the

Saracens, having taken Rhodes, sold the brass of this famous statue to a Jewish merchant, who loaded 900 camels with it. Allowing only 800 *lb* weight to every camel (though some will carry 12 or 1300 *lb*.) how many tons did the Colossus weigh?—Answer, 321 T. 8 C. 2 *qr*. 8 *lb*.

The invention of BELLS is by some attributed to the Egyptians. Be this as it may, it is certain, that they were always used to announce the festivals in honour of Osiris. Among the Hebrews, the high priests in grand ceremonies wore a kind of tunic, ornamented with small golden bells ; and the prophet Zechariah, chap. xiv. 20, speaks of bells hung to war-horses. At Athens, the priests of Proserpine and Cybele used them during their sacrifices. Bells were known also among the Persians, the Greeks, and the Romans.

It is said that Paulinus, Bishop of Nola, a city of Campania, in Italy, introduced bells into the church, about A. D. 400, to summon the people to divine worship, and to distinguish the canonical hours ; but it does not appear that large bells were used before the sixth century. In Britain they were applied to church purposes before the conclusion of the seventh century ; being introduced about the time when parish churches were first erected among us. Those of France and England appear to have been furnished with several bells. In the time of Clothaire II. King of France, and in the year 610, the army of that prince was frightened from the siege of the city of Sens, by the ringing of the bells of St. Stephen's church. Bells were baptized about the beginning of the following century.

The practice of ringing bells in change, or regular peals, is said to be peculiar to England ; whence Britain has been termed the *ringing island*. The custom seems to have commenced in the time of the Saxons, and was common before the Conquest. It is with us reduced to a science, and peals have been composed which bear the name of the inventors.

There are several bells of great magnitude in England : particularly Tom of Lincoln, weighed 11,200 pounds ; Peter of Exeter, weighed 12,500 pounds ; and "Mighty Tom," of Christ-Church, Oxford, weighing 17,000 pounds. But the largest bell in the known world is that of Moscow, the ancient capital of the Russian empire, of which a very particular and interesting account is given by Dr. Clarke of

Cambridge, in the first volume of his Travels. Its height is 19 feet, its circumference at the bottom 63 feet 11 inches, its greatest thickness 23 inches, and its weight 432,000 pounds. How many tons, &c. do each of these bells weigh?

Answer. The great bell at Lincoln, 5 T. ; at Exeter, 5 T. 11 C. 2 qr. 12 lb. ; at Oxford, 7 T. 11 C. 3 qr. 4 lb. ; and at Moscow, 192 T. 17 C. 16 lb.

THE RULE OF THREE DIRECT.

THE Rule of Three Direct teaches by three numbers given to find a fourth, in such proportion to the third, as the second is to the first; for which reason it is termed the Rule of Proportion; it is also called the Rule of Three from its having three numbers given; and because of its extensive use in arithmetic it is often called the Golden Rule.

In stating the question, place the given numbers in such order that the first and third terms be of the same kind; and the second, of the same with the fourth term or the answer required (see examples, No. 1 and 2.)

If the first and third terms be of different denominations, reduce them into one, and if the second be of more denominations than one, as for instance pounds, shillings, &c. reduce it into the lowest name mentioned (see example, No. 3.)

Multiply the second and third terms together and divide that product by the first, and the quotient will be the answer, in the same denomination with the second term; but if after the division there be a remainder, reduce it into the next denomination below, and divide by the same divisor, and the quotient will be so many of the next name, and so on; for instance, if the second term be pence the answer will be in pence, as in No. 2; and the remainder, if brought into farthings and divided, the second quotient will be farthings; and the same respecting any other denominations.

EXAMPLES.

No. 1. If 50 lb. of indigo cost £10, what will 1008 lb. cost?

$$\begin{array}{r}
 \text{lb.} \qquad \qquad \qquad \text{£.} \qquad \qquad \qquad \text{lb.} \\
 \bullet \quad \text{If } 50 \text{ ————— } 10 \text{ ————— } 1008 \\
 \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad 10 \\
 \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad 5|0)1008|0 \\
 \bullet \quad \bullet \quad \bullet \qquad \qquad \qquad \bullet \text{ Answer, } \underline{\underline{£201. 12s.}}
 \end{array}$$

No. 2. If 12 gallons of brandy cost £ 4. 10s. what will 134 gallons cost at that rate ?

gal. f 12	—	£. s. 4 10	—	gal. 134
		20		90
		<u>90</u>		12) 12060
				2 0) 100 5
				Answer, £ 50. 5s.

No. 3. If 4 C. 3 qr. of sugar cost £ 5. 15s. 7d. what will 4 hogsheads come to, weighing 42 C. 1 qr. 14 lb.

C. qr. If 4 3	—	£. s. d. 5 15 7	—	C. qr. lb. 42 1 14
4		20		4
<u>19</u>		<u>115</u>		<u>169</u>
28		12		28
<u>152</u>		<u>1387 d.</u>		<u>1366</u>
38				338
<u>592 lb.</u>				lb. 4746
				1387
				<u>33222</u>
				37968
				14238
				4746
				532) 6582702 (12373 d.
				532
				<u>1262</u>
				1064 12) 12373 ½
				<u>1987</u> 2 0) 103 1 1d.
				1596
				3910
				3724
				<u>1862</u>
				1596
				<u>266</u>
				4
				532) 1064 (2 farthings.
				1064

12373 pence, 2 farthings, reduced into pounds, &c. will give the above answer, £ 51. 11s. 1½d.

APPLICATION.

SPIKENARD is an odoriferous plant, abounding in the island of Java and other parts of the East Indies. Its ointment was in high estimation among the ancients. The evangelist Mark, chap. xiv. ver. 3, relates, that while our Saviour sat at table in the house of Simon the leper, in Bethany, a village near Jerusalem, a woman entered with an alabaster box of ointment of spikenard, which having broken, she poured the contents on his head. Supposing a Roman denarius or penny to be worth $7\frac{1}{2}d.$ of our money, what was the value of this unguent, which, ver. 5, was estimated at 300 such pence?—*Answer*, £9. 7s. 6d. sterling.

MEAD is a wholesome, agreeable liquor, prepared of honey and water. It is a liquor of very ancient use in Britain, and some persons deem the best sort scarcely inferior to foreign wines. It is thought probable, that before the introduction of agriculture into our island, mead was the only strong liquor known to its inhabitants; and it continued to be a favourite beverage among them and their posterity, long after they had become acquainted with other liquors.

If two gallons of mead be worth 4s. 9d. what is the value of a hogshead, wine measure?—*Answer*, £7. 10s. 11d.

METHEGLIN is a species of mead, prepared from honey boiled with water and fermented, and one of the most pleasant and general drinks the northern parts of Europe afford, and much used among the ancient inhabitants.

From the custom of drinking a beverage made with honey for thirty days' feast after a grand wedding, comes the expression honey-moon, which is a phrase used by the Teutones, who were an ancient people that inhabited the northern parts of Germany. Attila, King of Hungary, celebrated for the horrible ravages that he committed both in Gaul and Italy, drank so freely of hydromel (a sort of mead or metheglin, as the word imports) on his wedding-day, that he was found suffocated at night; an event which occurred in 453, and with him expired the empire of the Huns.

If a hogshead of metheglin, wine measure, be worth £7. 10s. 11d. what is the value of two gallons?

Answer, 4s. 9d.

The **WOOLLEN MANUFACTURE** makes the principal article of our foreign and domestic trade. In 1769, and two follow-

ing years, the value of woollens exported from England amounted to upwards of £13,000,000 sterling.

This important branch of commerce received considerable improvement in the reign of Edward III. by means of persons whom that monarch invited from the Netherlands in the year 1331; but what contributed most of all to the perfection of this valuable manufacture, was the emigration of the Protestants from that country.

These fugitives, being well received by Queen Elizabeth, established several large manufactures at Norwich, Colchester, Sandwich, Southampton, &c.

It is computed, that 1,500,000 people are employed in the British woollen manufacture. Now, supposing each of these to earn, one with another, 6*d.* per *working* day, how much will their labour amount to in a year?

Answer, £11,737,500.

TEA is an evergreen plant or shrub indigenous to China in Asia. It is a received opinion, that the green and bohea tea grows upon the same shrub; but that the latter admits of some kind of preparation, which removes its raking qualities, and gives it a deeper colour. This fashionable commodity was first brought into Europe by the Dutch, in 1610; and into England by Lord Arlington and Lord Ossory, from Holland, about the year 1666; at which period it was sold for 60*s.* a pound, though it did not cost more than 3*s.* 6*d.* a pound in Batavia. But it appears, that before this time, the drinking of tea, even in public coffee-houses, in this country, was not uncommon; for in 1660, a duty of 8*d.* per gallon was laid on the liquor made from it, and sold in all coffee-houses. The present consumption of tea is immense; it being computed by Zimmerman, in his political survey of Europe, that there are no less than 189,000,000 *lb.* exported annually from China into Europe. This respectable writer is, however, supposed to be misinformed in this particular, as persons conversant in the tea trade affirm, that the Britannic kingdoms consume nearly as much tea as all Europe besides; and 24,000,000 *lb.* are stated to be the greatest quantity ever imported into the British dominions by the East India Company in one year; and it is conjectured that very little is at present smuggled. Valuing the whole quantity legally imported at £6,900,000 sterling, what is that per pound?—*Answer*, 5*s.* 9*d.*

GLASS is a transparent; solid, brittle, factitious body

produced of a species of salt and sand, or stone, by the action of fire.

The discovery of glass, according to Pliny, took place by accident, in Syria, at the mouth of the river Belus, by certain merchants driven thither by the fortune of the sea. Being obliged to live there, and dress their victuals by making a fire on the ground, and plenty of the plant *kali* being on the spot, this herb being burnt to ashes, and the sand or stones of the place accidentally mixing with it, a vitrification was undesignedly made; from whence the *lime* was taken, and easily improved.

The first place, according to some authors, mentioned for the art of making glass, is Sidon in Syria, which became famous for glass, and glass-houses; but others maintain, that the first glass-houses noticed in history were erected at Tyre, which, they add, was the only staple of the manufacture for many ages. Italy had the first glass windows; next France, from whence they came into England, and began to be common about the year 1180. The Venetians, for many years, excelled all Europe in the fineness, and size of their looking-glasses; but they are now surpassed both by the English and French.

The glass manufacture was first begun in England, in 1557, in London; improved in 1635; and brought to a great degree of perfection in the reign of King William III. But the first glass-plates, for looking-glasses and coach-windows, were made in 1673, at Lambeth.

An extensive manufactory of this elegant and valuable branch of commerce, first established in Lancashire about the year 1773, bids fair to rival, if not excel, the most celebrated continental manufactures, with respect to the quality, brilliancy, and size of its productions. Mr. Townsend, however, who travelled through Spain in 1786, asserts, that the glass manufacture at St. Ildefonsa (a noted palace built by Philip V. about 24 miles from the famous Escorial) is carried to a degree of perfection unknown in England. The largest mirrors are made in a brass frame, 162 inches long, 93 wide, and 6 deep, weighing nearly nine tons. These are designed wholly for the royal palaces, and for presents from the king.

If 1728 elegant wine glasses were bought for £65. 2s. how must they be sold per dozen, or per glass, to gain ten guineas by the sale of the whole?

Answer, 10s. 6d. per dozen; or 10½d. per glass.

THE RULE OF THREE INVERSE.

The Rule of Three Inverse, or, as it is often called, of Indirect Proportion, is used, when of four numbers the third bears the same proportion to the first as the second does to the fourth ; therefore the less the third term is in respect to the first, the greater will the fourth be in respect to the second.

Multiply the first and second terms together, and divide their product by the third, and the quotient will be the answer.

EXAMPLES.

No. 1. If a board be 9 inches broad, how much in length will make a square foot ?

$$\begin{array}{rcl}
 \text{in. b.} & & \text{in. l.} \\
 \text{If } 12 & \text{---} & 12 & \text{---} & 9 \\
 & & 12 & & \\
 & & \hline
 & & 9)144 & &
 \end{array}$$

Answer, 16 inches in length.

No. 2. How many yards of sarcenet, of 3 *qr.* wide, will be 9 yards of cloth of 8 *qr.* wide.

$$\begin{array}{rcl}
 \text{qr. w.} & & \text{qr. l.} \\
 \text{If } 8 & \text{---} & 9 & \text{---} & 3 \\
 & & 8 & & \\
 & & \hline
 & & 3)72 & &
 \end{array}$$

Answer, 24 yards.

To know when the question belongs to the direct, and when to the indirect or inverse rule, consider whether the answer to the question ought to be more or less than the second number : if more, then the lesser of the first and third numbers must be your divisor ; but if less, then the greater of the first and third numbers must be your divisor.

APPLICATION.

SHALLOON is a slight woollen stuff, supposed to have received its name from Chalons-sur-Marne, in the department of Marne, France, where it still continues to be manufactured. What quantity of shalloon, 3 *qr.* of a yard wide, will line $7\frac{1}{2}$ yards of cloth that is $1\frac{1}{2}$ *yd.* wide?

Answer, 15 yards.

If a person lend another the sum of £200 for 12 months, how many months should the latter lend the former £150, to requite the obligation?---*Answer,* 16 months.

How many yards of MATTING, 2 feet 6 inches wide, will cover a floor that is 27 feet long and 20 feet broad?

Answer, 72 yards.

The CARPET MANUFACTURE is said to have been introduced into France from Persia, in the reign of Henry IV. The art was brought to London in 1750, by two men who quitted France in disgust, and came here to procure employment. This they obtained from the late Mr. Moore, who, by risking a very considerable expense, succeeded in establishing this important and useful manufacture, and by whose ingenuity and perseverance it has been brought to a very high degree of perfection. We have also manufactories for carpets that are much esteemed, at Axminster, Wilton, Kidderminster, and other places.

How many yards of carpeting, 3 *qr.* broad, will cover a room which is 3 yards in length and 4 in breadth?

Answer, 16 yards.

THE RULE OF FIVE.

THIS rule is so called from its having five numbers or terms given to find a sixth.

If the proportion be direct, the sixth term must bear such a proportion to the fourth and fifth, as the third bears to the first and second; but if the proportion be inverse, the sixth must bear such proportion to the fourth and fifth as the first bears to the second and third.

The three first terms are a supposition, the two last a demand ; and in placing the three first ; let the principal cause of gain, loss, or action, &c. be put first ; that which denotes time, distance, &c. second ; and the remaining one in the third. Then, in order to find whether the proportion be direct or inverse, place the two other terms which move the question underneath those of the same name ; if the blank fall under the third term, the proportion is direct ; if under the first or second, it is inverse.

In direct proportion, multiply the two first terms together for a divisor and the three last for a dividend (see example. No. 1.) In inverse proportion, multiply the third and fourth terms together for a divisor, and the other three for a dividend (see example, No. 2) and the quotients in each case will be the answer.

Note, Every question in each part of this rule may be proved by two statements in the Rule of Three.

EXAMPLES.

No. 1. If £100. principal in 12 months gain £5. interest, what will £246. gain in 7 months ?

£. pr.	mo.	£. int.	£.	mo.
100	12	5	246	7
12			7	

1200

1722

5

1200)8610(7l.

8400

210

20

1200)4200(3s.

3600

1200)7200(6d.

7200

Answer, £7. 3s. 6d.

No. 2. If £100. principal in 12 months gain £6. interest, what principal will gain £20. interest in 8 months?

£. pr.	mo.	£ int.	mo.	£. int.
100	12	6	8	20
12			6	
			—	
			48	the divisor.

$$\begin{array}{r} 48 \overline{) 24000} \text{ (500\% principal—Answer.} \\ \underline{24000} \end{array}$$

APPLICATION.

The PILCHARD is a small salt-water fish, larger than an anchovy, but smaller than the herring, which in other respects it resembles. They abound in the Mediterranean Sea, but are fish of passage. The chief pilchard fisheries are along the coasts of Dalmatia, in the Gulf of Venice; on the coasts of France, between Belle-Isle and Brest; and along the shores of Cornwall and Devonshire. It is a saying of the Cornish men, that the pilchard is the smallest fish in size, the most in number, and greatest in gain, of any that they take out of the sea; an observation amply confirmed by Borlase's account of this fishery. The number obtained at one shooting out of the nets is amazingly great. In 1767, there were at one time enclosed in St. Ives Bay, Cornwall, 7000 hogsheads, each containing 35,000 fish; in all 245,000,000. The cash paid annually, on an average of ten years, for pilchards exported from Cornwall, amounted to £49,325. 10s.

Suppose 6 men could barrel up 24 hogsheads of pilchards in 2 days, how many days would 100 men require to fill the number of hogsheads above mentioned?

Answer, 35 days.

The great colony of HERRINGS, we are told, sets out from the Icy Sea about the middle of winter, composed of such numbers as exceed all powers of imagination. The main body begins in a certain latitude to separate into two grand divisions, one of which moves westward, and pours down the coasts of America; the other division takes a more eastern direction, and falls in with the great island of Iceland about the beginning of march. The Shetland Isles oblige them again to divide into two shoals, which shape

their course along the eastern and western coasts of the British Isles; and the last are observed to be much larger and fatter, as well as considerably more abundant, than those on the east side. The immediate cause of their migration is supposed to be their strong desire to remove to warmer seas, for the sake of depositing their spawn, where it will vivify with more certainty than under the frigid zone. It cannot be from defect of food that they leave the polar regions, whatever that food may be, for they come to us full of fat, and on their return are generally observed to be very lean. Our countrymen have been long reproached, and apparently with a good deal of justice, for their remissness in this lucrative branch of commerce. The advantageous situation of our coasts might be of immense benefit to us, did we not permit the Dutch, Hamburgers, and others, to come yearly in vast numbers, and not only take the fish from our own coasts, but sell them to us for our money, when they have done. Scotland, it is generally allowed, suffers incredibly on this score: no country in Europe can pretend to rival it in the abundance of the finest fish wherewith its numerous harbours, lakes, and rivers are stored. The Scottish islands, especially those on the western side, do certainly lie most commodiously for carrying on the fishing trade to the utmost perfection. Loch Fyne, says the Rev. Mr. Gilpin, is a salt lake communicating with the sea. It has a crowded navigation, being one of the favourite haunts of the herring, and at certain seasons of the year is frequented by innumerable shoals, insomuch that the lake is said to contain one part water and two parts fish. In a single bay of this lake above 600 boats are sometimes employed in taking them. Each of these vessels clears on an average annually from £40 to £50, according to Dr. Garnett, who adds, that 20,000 barrels, each on a medium containing 700 herrings, have been caught and cured in one season in Loch Fyne.

If two boats could take four thousand herrings in six days, how many weeks (exclusive of Sundays) would the number of boats mentioned above require to take the entire quantity of fish specified by Dr. Garnett?

Answer, 11 weeks 4 days.

A **STREAM-ENGINE** is a machine that derives its moving power from the elasticity and condensibility of the steam of boiling water. It is allowed to be the most valuable present that the arts of life have ever received from the philosopher.

and the most curious object that human ingenuity has yet offered to his contemplation. The mariner's compass, the telescope, the microscope, spectacles, gunpowder, and many other most useful servants to the weakness and necessities of man, were the productions of chance, and we do not exactly know to whom we are indebted for them; but the steam-engine was, in the very beginning, the result of reflection, and the production of a very ingenious mind; and every improvement that it has received, and every alteration in its construction and principles, were also the result of philosophical study. The steam-engine was, beyond all doubt, invented by the Marquis of Worcester, in the reign of Charles II. but it does not appear that the noble inventor could ever interest the public either in favour of this or his other discoveries. Captain Savary, a person of great ingenuity and ardent mind, saw, however, the reality and practicability of the Marquis's project, and, about the year 1696, erected several machines of this kind. The tin-mines of Cornwall standing in great need of hydraulic assistance, Mr. Savary was much engaged in projects for draining them by his steam-engine. This made its construction and principles well known among the machinists and engineers of that neighbourhood, some of whom made successful attempts to improve it. Among these was a Mr. Newcomen, who erected one upon a new principle, that is now called Newcomen's Engine. Mr. Keane Fitzgerald also made an important addition to the steam-engine; but to Mr. Watt, of Glasgow, and Mr. Boulton, of Soho, it is indebted for its present state of excellence.

These invaluable machines are of most extensive use being employed in drawing water from coal-pits and mines in supplying cities with water, and in working metals: in short, in every demand of manufacture on a great scale they offer us an indefatigable drudge, whose strength has no bounds. The greatest mechanical project that ever engaged the attention of man was on the point of being executed by this machine. The States of Holland were treating with Messrs. Watt and Boulton for draining the Haerlem Meer, and even reducing the Zuyder Zee; but the unsettled state of public affairs in that country has hitherto prevented the execution of the plan, which, there is no doubt, will be fully accomplished at some more auspicious period.

To such amazing perfection has this *chef-d'œuvre* of

human art at length being brought, that the consumption of one bushel of good pit-coal will enable it to raise 6,000 hogsheads of water ten feet high, or to do the work of ten horses for one hour. Upon this supposition, how many gallons of this liquid would 144 pecks of coal raise to a similar height?---*Answer*, 13,608,000 gallons.

PRACTICE.

THIS rule is so called from its frequent use and brevity in casting up all sorts of goods or merchandise.

It is performed by taking what are called aliquot or even parts of the different denominations; by which means many tedious reductions may be avoided. It would be an endless task to give you all the easy methods of operation, but the general rules are all given with examples to illustrate them.

All questions in the Rule of Three, where the first number in the statement as 1, may be performed by this rule; but it is necessary first to learn the following tables by heart:

Tables.

Parts of a Shilling.

<i>d.</i>		
1	is	$\frac{1}{20}$
1½	—	$\frac{3}{40}$
2	—	$\frac{1}{20}$
3	—	$\frac{3}{40}$
4	—	$\frac{1}{10}$
6	—	$\frac{3}{20}$

Parts of a Pound

<i>s.</i>	<i>d.</i>		
1	0	is	$\frac{1}{20}$
1	8	—	$\frac{1}{25}$
2	0	—	$\frac{1}{10}$
2	6	—	$\frac{1}{12}$
3	4	—	$\frac{1}{15}$
4	0	—	$\frac{1}{5}$
5	0	—	$\frac{1}{4}$
6	8	—	$\frac{1}{3}$
10	0	—	1

Rule 1.

When the price is less than a penny, divide by the aliquot parts that are in a penny; then by 12 and 20, which will give the answer.

EXAMPLES.

No. 1. 2106 pounds of iron at $\frac{1}{2}d.$ per pound.

$$\begin{array}{r}
 \text{lb.} \\
 \frac{1}{2}d. \text{ is } \frac{1}{2} - 2) 2106 \\
 \hline
 12) 1053 \\
 \hline
 2|0) 8|7 \text{ } 9d.
 \end{array}$$

£4. 7s. 9d. *Answer.*No. 2. 3244 ounces of sulphur at $\frac{1}{2}d.$ per ounce.

$$\begin{array}{r}
 \text{oz.} \\
 \frac{1}{2}d. \text{ is } \frac{1}{2} - 2) 3244 \\
 \hline
 \frac{1}{2}d. \text{ is } \frac{1}{2} \text{ of } \frac{1}{2}d. - 2) 1622 \\
 \hline
 811 \\
 \hline
 12) 2433 \\
 \hline
 2|0) 20|2 \text{ } 9d.
 \end{array}$$

£10. 2s. 9d. *Answer.**Rule 2.*

When the price is less than a shilling, divide by the aliquot parts that are in a shilling; add them together and it will give the answer in shillings, which divide by 20, as before.

EXAMPLES.

No. 1. 246 yards of ribbond at $3d.$ per yard.

$$\begin{array}{r}
 \text{yd.} \\
 3d. \text{ is } \frac{1}{4} - 4) 246 \\
 \hline
 2|0) 6|1 \text{ } 6d.
 \end{array}$$

£3. 1s. 6d. *Answer.*

No. 2. 249 ells of canvass at 4*d.* per ell.

$$\begin{array}{r}
 \text{ells.} \\
 4d \text{ is } \frac{1}{3} - 3 \overline{)249} \\
 \hline
 4d. \text{ is } \frac{1}{8} \text{ of } 4d. - 8 \overline{)83} \\
 \hline
 10 \text{ } 4\frac{1}{2}d. \\
 \hline
 2 \overline{)09} \overline{)3} \text{ } 4\frac{1}{2}d.
 \end{array}$$

£4. 13*s.* 4*d.* Answer.

Rule 3.

When the price is more than a shilling, but less than two, set the given quantity down as so many shillings, but draw no line under it; then take the aliquot parts of so much of the price as is more than a shilling, as in the last rule; add all the amounts together, and the sum will be the answer in shillings.

EXAMPLES.

No. 1. 2050 yards of calico at 1*s.* 4*d.* per yard.

$$\begin{array}{r}
 yd. \\
 4d. \text{ is } \frac{1}{3} - 3 \overline{)2050} \\
 \hline
 683 \text{ } 4d. \\
 \hline
 2 \overline{)0273} \overline{)3} \text{ } 4d.
 \end{array}$$

£136. 13*s.* 4*d.* Answer.

No. 2. 6806 pounds of sugar at 1*s.* 3*d.* per pound.

$$\begin{array}{r}
 lb. \\
 3d. \text{ is } \frac{1}{4} - 4 \overline{)6806} \\
 4d. \text{ is } \frac{1}{8} \text{ of } 3d. - 6 \overline{)1701} \text{ } 6d. \\
 \hline
 283 \text{ } 7d. \\
 \hline
 2 \overline{)0879} \overline{)1} \text{ } 1d.
 \end{array}$$

£439. 11*s.* 1*d.* Answer

Rule 4.

When the price is any even number of shillings less than 20, multiply the given quantity by half the price, doubling

the first figure of the product and calling it shillings; the rest of the product will be pounds.

EXAMPLES.

No. 1.
2476 lb. of tea at 8s. per lb.

lb.
2476
4

£ 990. 8s. Answer.

No. 2.
2967 yd. of cloth at 14s.

yd.
2967
7

£ 2076. 18s. Answer.

Rule 5.

When the price is any odd number of shillings under 20, multiply the given quantity by the price, and the product will be the answer in shillings.

EXAMPLE.

4962 gallons of spirits at 19s. per gallon.

gal.
4962
19

24094278

£ 4713. 18s. Answer.

Rule 6.

When the price is shillings, or shillings and pence, and they are an aliquot part of a pound, divide by the aliquot part, and the quotient will be the answer in pounds.

EXAMPLES.

No. 1. 254 yards of cloth at 10s. per yard.

yd.
10 : is $\frac{1}{2}$ — 2)254

£ 127. Answer.

No 2. 972 gallons of British wine as 6s. 8d. per gallon.

$$\begin{array}{r}
 \text{gal.} \\
 6s. 8d. \text{ is } \frac{1}{3} - 3 \overline{)972} \\
 \hline
 \pounds 324. \text{ Answer.} \\
 \hline
 \end{array}$$

Rule 7.

When the price is shillings and pence, and they are not an aliquot part of a pound, multiply the given quantity by the shillings and take parts for the pence, &c. ; add them together, and the sum will be the answer in shillings.

EXAMPLES.

No. 1. 427 yards of Irish at 5s. 9d. per yard.

$$\begin{array}{r}
 \text{yd.} \\
 6d. \text{ is } \frac{1}{2} - 2 \overline{)427} \\
 \hline
 5 \\
 \hline
 2135 \\
 3d. \text{ is } \frac{1}{4} \text{ of } 6d. - 2 \overline{)213} \quad 6d. \\
 \hline
 106 \quad 9d. \\
 \hline
 2 \overline{)0} 245 \overline{)5} \quad 3d. \\
 \hline
 \pounds 122. 15s. 3d. \text{ Answer.}
 \end{array}$$

No. 2. 402 pounds of tea at 10s. 4½d. per pound.

$$\begin{array}{r}
 \text{lb.} \\
 4d. \text{ is } \frac{1}{3} - 3 \overline{)402} \\
 \hline
 10 \\
 \hline
 4020 \\
 \frac{1}{2}d. \text{ is } \frac{1}{8} \text{ of } 4d. - 8 \overline{)134} \\
 \hline
 16 \quad 9d. \\
 \hline
 2 \overline{)0} 417 \overline{)0} \quad 9d. \\
 \hline
 \pounds 208. 10s. 9d. \text{ Answer.}
 \end{array}$$

Rule 8.

When the given price is pounds and shillings, multiply the quantity by the pounds, and proceed with the shillings,

if they are even, as in rule 4 (see the following example, No. 1); but if odd take aliquot parts, add them together, and the sum will be the answer (see No. 2.)

•
EXAMPLES.

No. 1. 649 pieces of Irish at £4. 6s. per piece.

<i>pieces.</i>	<i>pieces.</i>
649	649
4	3
<hr style="width: 50%; margin: 0 auto;"/> 2596	<hr style="width: 50%; margin: 0 auto;"/> £194. 14s.
194. 14s.	
<hr style="width: 50%; margin: 0 auto;"/> £2790. 14s.	<i>Answer.</i>

No. 2. 514 watches at £10. 15s. per watch

<i>watches.</i>
10s. is $\frac{1}{4}$ — 2) 514
10
<hr style="width: 50%; margin: 0 auto;"/> 5140
5s. is $\frac{1}{2}$ of 10s. — 2) 257
128. 10s.
 £5525. 10s. <i>Answer.</i>

Rule 9.

When the price is pounds, shillings, and pence, and the shillings and pence are an aliquot part of a pound, multiply the given quantity by the pounds, as in the last rule; and take parts for the shillings and pence, as in rule 6; add them together, and the sum will be the answer.

• • •
EXAMPLE.

274 pieces of Irish at £7. 6s. 8d. per piece.

<i>pieces.</i>
6s. 8d. is $\frac{1}{3}$ — 3) 274
7
<hr style="width: 50%; margin: 0 auto;"/> 1918
91. 6s. 8d.

£2009. 6s. 8d. *Answer.*

10.

When the price is pounds, shillings, pence, and farthings, and the shillings and pence are not an aliquot part of a pound, reduce the pounds and shillings into shillings; multiply the given quantity by the shillings, as in rule 9; take parts for the pence and farthings, as in rule 2.

EXAMPLE.

279 pieces of muslin at £6. 11s. 9½d. per piece.

£. s.	<i>pieces.</i>
6 11	6d. is ½—2)279
20	131
<hr/>	<hr/>
131s.	279
	837
	279
	<hr/>
	36549
3d. is ¼ of 6d.—2)	139 6d.
½d. is ⅙ of 3d.—6)	69 2
	11 7½

210)3676|9 10½d.

£1838. 9s. 10½d. *Answer.*

A few more examples, in each of the preceding rules, are here subjoined for the learner's practice, for which he will need no farther instructions; as it will be only necessary to consider to which rule each example belongs, and refer to it for the mode of its operation.

EXAMPLES.

- 347, at 0½d? — *Answer*, 14s. 5½d.
 810, at 0¾d? — *Answer*, £2. 10s. 7½d.
 352, at 1½d? — *Answer*, £2. 4s.
 1776, at 3d? — *Answer*, £22. 4s.
 899, at 6d? — *Answer*, £22. 9s. 6d.
 325, at 2½d? — *Answer*, £3. 0s. 11½d.
 2700, at 7½d? — *Answer*, £81. 11s. 3d.
 1720, at 11½d? — *Answer*, £82. 8s. 4d.
 2643, at 2s? — *Answer*, £264. 6s.
 872, at 8s? — *Answer*, £348. 16s.
 5271, at 14s? — *Answer* £3689. 14s.

- 264, at 19s? — *Answer*, £250. 16s.
 7150, at 1s. 8d? — *Answer*, £595. 16s. 8d.
 3150, at 3s. 4d? — *Answer*, £525.
 2715, at 2s. 6d? — *Answer*, £339. 7s. 6d.
 2710, at 6s. 8d? — *Answer*, £903. 6s. 8d.
 7211, at 1s. 3d? — *Answer*, £450. 13s. 9d.
 801, at 10s. 9d? — *Answer*, £430. 10s. 9d.
 807, at 16s. 5d? — *Answer*, £662. 8s. 3d.
 2710, at 3s. 2d? — *Answer*, £429. 1s. 8d.
 841, at 13s. 2d? — *Answer*, £553. 13s. 2d.
 969, at 19s. 11d? — *Answer*, £964. 19s. 3d.
 875, at 1s. 7½d? — *Answer*, £61. 1s. 4¼d.
 3715, at 9s. 4¼d? — *Answer*, £1741. 8s. 1½d.
 1603, at 16s. 10½d? — *Answer*, £1352. 10s. 7½d.
 137, at £1. 17s. 6¼? — *Answer*, £257. 0s. 4¼d.
 947, at £4. 15s. 10¼d? — *Answer*, £4538. 13s. 10¼d.
 457, at £14. 17s. 9½d? — *Answer*, £6804. 10s. 9½d.

SIMPLE INTEREST.

SIMPLE INTEREST is that which arises only from the principal, and is a profit allowed by the borrower to the lender, for the loan or forbearance of any sum of money, for some determined space of time, and at any rate (per cent. per annum) agreed upon; which, according to law, must not exceed £5. for the use or interest of £100. principal, called cent. for 12 months, called annum.

The amount is the principal and interest added together.

Note, The rules for simple Interest serve also for calculating Factorage, Brokerage, Insurance, purchasing of Stocks, or any thing else, that is rated at so much per cent.

To find the interest of any sum of money, for any number of years, multiply the principal by the rate per cent.; that product divided by 100, will give the interest for a year, which multiply by the number of years given, and the product will be the answer.

EXAMPLES.

No. 1. What is the interest of £246. 10s. 8d. for 12 years, at 5 per cent. per annum?

	£.	s.	d.	
	246	10	8	
			5	
	<hr/>			
12	32	13	4	
	<hr/>			
.	12	6	6½	
			12	
	<hr/>			
.	£147	18	3	Answer.
	<hr/>			

No. 2. What is the amount of £672. for 7 years, at 4 per cent. per annum?

	£.			
	672			
		4		
	<hr/>			
7	26	17	7	
			7	
	<hr/>			
	188	3	1	Interest.
	672	0	0	Principal.
	<hr/>			
	£860	3	1	Amount.
	<hr/>			

When the rate per cent. is $\frac{1}{2}$, $\frac{1}{3}$, or $\frac{3}{4}$ more than the pounds given in the said rate, multiply the principal by the pounds in the rate per cent. then take parts for $\frac{1}{2}$, $\frac{1}{3}$, or $\frac{3}{4}$, from the principal, which add to the product, and the sum divide by 100, as before.

EXAMPLES.

No. 1. What is the interest of £236. 18s. for 2 years, at $4\frac{1}{2}$ per cent. per annum?

	£.	s.	d.	
$\frac{1}{2}$ per cent.—2)	236	18	0	
			4	
	947	12	0	
	118	9	0	
	1 00	10 66	1	0
	10	13	2 $\frac{1}{2}$	
			2	
	£21	6	5	Answer.

No. 2. What is the interest of £600. for 7 years, at $3\frac{1}{2}$ per cent. per annum?

	£.	
$\frac{1}{2}$ per cent.—2)	600	
	3	
	1800	
$\frac{1}{4}$ per cent.—2)	300	
	150	
	1 00	22 50
	22	10
		7
	£157	10s. Answer.

COMPOUND INTEREST.

COMPOUND INTEREST is that which arises both from principal and its interest put together, as the interest becomes due, but not paid; the same interest is allowed upon that interest unpaid, as was upon the principal; so it becomes a part of the principal; and for which reason it is called interest upon interest. or compound interest.

It is not lawful to let out money at compound interest ; yet, in purchasing of annuities or pensions, and leases in reversion, it is usual to allow compound interest to the purchaser for his ready money, and therefore makes it necessary that it should be understood.

Find the first year's interest as in simple interest. Add that interest to the principal, which sum will become the second year's principal, and so on for any number of years.

Subtract the given principal from the last amount, and the remainder will be the interest required.

EXAMPLE.

What is the compound interest of £600. for 3 years, at 5 per cent.

$$\begin{array}{r}
 \text{£.} \\
 600 \\
 5 \\
 \hline
 1|00)30|00 \\
 \quad 30 \\
 \quad 600 \\
 \hline
 \text{£630} \text{ Second year's principal.} \\
 \quad 5 \\
 \hline
 1|00)31|50 \\
 \quad 31 \ 10 \\
 \quad 630 \\
 \hline
 \text{£661 } 10s. \text{ Third year's principal.} \\
 \quad 5 \\
 \hline
 1|00)33|07 \ 10 \\
 \quad 33 \ 1 \ 6 \\
 \quad 661 \ 10 \\
 \hline
 694 \ 11 \ 6 \text{ Amount.} \\
 600 \ 0 \ 0 \text{ Original principal.} \\
 \hline
 \text{£94 } 11 \ 6 \text{ Answer}
 \end{array}$$

APPLICATION.

JOHN BAPTIST JOSEPH LANGUET, the celebrated vicar of St. Sulpice, at Paris, was one of those extraordinary men whom Providence mercifully raises up for the relief of the indigent, and the solace of the wretched, for the good of society, and for the glory of nations. It is said, from good authority, that he sometimes disbursed the amazing sum of a million of livres in charities and charitable establishments in a single year. When there was a general dearth in 1725, he sold, in order to relieve the poor, his household goods, his pictures, and some curious pieces of furniture, that he had procured with great difficulty. His boundless beneficence was not confined to his own parish or neighbourhood; for, when the plague raged at Marseilles, he remitted large sums into Provence, to assist those afflicted people. This eminent philanthropist was born at Dijon, June 6, 1675; and, after exhausting his whole fortune in works of charity, died in 1750.

Valuing a livre at 10½*d.* sterling, what is the value of this good prelate's annual donation in sterling money, and the interest of it for nine months, at 4½ per cent. per annum?—*Answer*, £43,750. its value; and £1394. 10*s.* 7½*d.* its interest for nine months.

A **JEWEL** is any precious stone, or ornament beset with them. Jewels made a part of the ornaments with which the Jews, Greeks and Romans, especially their ladies of distinction, adorned themselves. So prodigious was the extravagance of the Roman ladies, in particular, that Pliny the Elder says, he saw Lollia Paulina with an equipage of this kind, amounting, according to Dr. Arbuthnot's calculation, to £322,916. 13*s.* 4*d.* of our money. At the splendid entertainment that Prince Potemkin gave to the late Empress of Russia at Petersburg, in 1791, the jewels worn by 48 young persons belonging to the court, who performed a ballet, were estimated at a million sterling.

What is the interest of the two sums mentioned in this question, for one day, at 5 per cent. per annum?

Answer, £181. 4*s.* 5*d.* per day.

The art of weaving **TAPESTRY** was introduced into England by William Sheldon, Esq. about the end of the reign of Henry VIII.; and in the reign of James I. a manufacture of tapestry was set up at Mortlake, in Surry, which attained to a great degree of perfection. The first establish-

ment of a tapestry manufacture at Paris was under Henry IV. about the year 1606, by means of several excellent artists, whom he invited from Flanders. But this fell with the death of that prince. Under Louis XIV. it was retrieved by the care and address of the great Colbert, to whom is owing the establishment of the Gobelins, a royal tapestry manufacture, which has produced works of this kind scarcely inferior to the finest English or Flemish tapestry, either with regard to the design, the colours, or the strength. The finest paintings may be copied in this work, and the greatest masters have been employed in draughts for the tapestry weavers. There is also an establishment of this kind at Beauvais.

The House of Lords, in Westminster, is a room ornamented with tapestry, which records our glorious victory over the Spanish Armada. It was bespoken by the Earl of Nottingham, who sold it to James I. The design was drawn by Cornelius Vroom, and the tapestry executed by Francis Spiering. Vroom had 100 pieces of gold for his labour. The arras itself cost £1628. It was not put up till the year 1650, after the extinction of monarchy, when the house of Lords was used as a committee-room for the House of Commons. The heads of the naval heroes who commanded on the memorable days of engagement, form a matchless border round the work, animating posterity to emulate their illustrious example.

What would be the interest of the sum which the before-mentioned arras cost, for seven years and nine months, at $4\frac{1}{2}$ per cent. per annum?—*Answer*, £599. 6s. 0 $\frac{1}{2}$ d.

EXPLANATION OF THE FOLLOWING TABLES.

As in the present state of commercial affairs, money is seldom advanced at less than 5 per cent. per annum, and as it is also illegal to be advanced at more, the following Interest Tables will be found to contain enough for all common purposes; for it will be easily seen, that by the help of addition the interest of any sum may be found, for any time whatever, without the labour of long and tedious calculations. In the first column is the principal, and in the upper row the number of days or months; thus the interest of any sum may be found in a direct line with the one, and underneath the other.

INTEREST TABLE.

[illegible]

INTEREST TABLE.

[illegible]

INTEREST TABLE

£.	17 day	s.	da	20	23	21 d
£.	s.	s.	d	avs.	£	£
1	0	0	0	0	0	0
2	0	0	0	0	0	0
3	0	0	0	0	0	0
4	0	0	0	0	0	0
5	0	0	0	0	0	0
6	0	0	0	0	0	0
7	0	0	0	0	0	0
8	0	0	0	0	0	0
9	0	0	0	0	0	0
10	0	0	0	0	0	0
20	0	0	0	0	0	0
30	0	0	0	0	0	0
40	0	0	0	0	0	0
50	0	0	0	0	0	0
60	0	0	0	0	0	0
70	0	0	0	0	0	0
80	0	0	0	0	0	0
90	0	0	0	0	0	0
100	0	0	0	0	0	0
200	0	0	0	0	0	0
300	0	0	0	0	0	0
400	0	0	0	0	0	0
500	0	0	0	0	0	0
800	0	0	0	0	0	0
1000	0	0	0	0	0	0

NT ST

P	1 mon.		2 1		3		4		5 mon.		6		8 m		m		1 mon	
	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.
1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	1	8	0	3	4	0	5	0	2	6	0	6	0	1	5	0	1
30	0	2	6	0	5	0	8	0	7	0	0	0	0	0	1	3	4	1
40	0	3	4	0	6	8	0	0	0	0	0	0	0	0	1	10	0	1
50	0	4	2	0	8	4	0	0	0	0	0	0	0	0	2	1	8	4
60	0	5	0	0	10	0	0	0	0	0	0	0	0	0	2	10	0	2
70	0	5	16	0	11	8	0	0	0	0	0	0	0	0	2	12	6	4
80	0	6	8	0	13	4	1	0	0	0	0	0	0	0	3	0	0	0
90	0	6	6	0	15	0	1	2	6	1	0	0	0	0	3	15	0	4
100	0	8	4	0	16	8	1	5	0	0	0	0	0	0	4	3	4	4
200	0	16	8	1	13	4	2	10	0	0	0	0	0	0	8	6	8	8
300	1	5	0	2	10	0	3	6	0	0	0	0	0	0	12	10	0	13
400	1	13	4	3	6	8	6	13	4	8	6	5	0	0	16	13	4	18
500	2	1	8	4	3	4	8	6	8	10	3	4	12	0	20	16	8	22
600	3	6	8	6	13	4	10	0	0	13	6	8	13	4	33	6	8	36
700	4	3	8	8	12	10	16	13	4	20	16	8	26	13	41	13	4	45
800	4	3	8	8	12	10	16	13	4	20	16	8	26	13	41	13	4	45

EXPLANATION

OF THE CHARACTERS USED IN THE HIGHER RULES OF
ARITHMETIC.

<i>Signs.</i>	<i>Names.</i>	<i>Significations.</i>
+	<i>Plus, or more</i>	The sign of Addition, as $6+2$ is 8.
	<i>Minus, or less</i>	The sign of Subtraction, as $6-2$ is 4.
	<i>Multiplied into or by</i>	The sign of Multiplication, as 6×2 is 12.
	<i>Divide by</i>	The sign of Division, as $6\div 2$ is 3.
	<i>Equal to</i>	The sign of equality, as $6+2=8$.
	$\left\{ \begin{array}{l} \text{Is to} \\ \text{So is} \end{array} \right\}$	The signs of Proportionals, as $2:4::6:12$.
	<i>Extraction of the roots</i>	The Square Root of 9=3 is $\sqrt{9}=3$, and the Cube Root of $8=2$ is $\sqrt[3]{8}=2$.

$6-4\times 9=18$; signifies, that 6, less 4, multiplied by 9=18.

N. B. 8^2 denotes that 8 is to be squared.

9^3 denotes that 9 is to be cubed.

$\sqrt[3]{4}$, or $4^{\frac{1}{3}}$, denotes the Cube Root of the number 4

VULGAR FRACTIONS.

A FRACTION is a part or parts of something considered as an unit or integer, and consists of two parts or quantities, one written over the other with a line between them, as $\frac{1}{2}$, $\frac{2}{3}$, $\frac{1\frac{1}{2}}{8}$, &c.

The number placed below the line is called the denominator of the fraction, because it denominates or shows how many parts the unit is broken or divided into; and the number above the line is called the numerator, because it enumerates or shows how many of those parts are contained in the fraction.

A vulgar fraction is either proper, improper, compound or mixed.

A proper fraction is such whose numerator is less than the denominator, as $\frac{2}{3}$, $\frac{7}{8}$, $\frac{2\frac{3}{4}}{10}$, $\frac{1\frac{6}{11}}{13}$, &c.

An improper fraction is when the numerator is equal to, or greater than, its denominator, as $\frac{5}{3}$, $\frac{10}{12}$, $\frac{2\frac{1}{2}}{7}$, &c.

A compound fraction is the fraction of a fraction, and known by the word of, as $\frac{1}{2}$ of $\frac{2}{3}$ of $\frac{3}{4}$, &c.

A mixed number is composed of a whole number and a fraction, as $4\frac{1}{2}$, $12\frac{1}{8}$, $142\frac{11}{100}$, &c.

REDUCTION OF VULGAR FRACTIONS

Rule 1.

To reduce a vulgar fraction to its lowest terms, divide the greater term by the less, and that divisor by the remainder following, till nothing remains: then by the last remainder divide both parts of the fraction, and the quotients will give the fraction required. If the remainder is 1, the fraction is already in its least terms.

EXAMPLES.

No. 1. Reduce $\frac{336}{896}$ to its lowest terms.

$$\begin{array}{r} 336)896(2 \\ \underline{} \\ 224)336(1 \\ \underline{} \\ 112)224(2 \\ \underline{} \end{array}$$

Then $112)336(=3$, the term required.

No. 2. Reduce $\frac{2832}{12848}$ to its lowest terms.

$2832)12848(4$ then $16)12848(=111$, the answer

$$\begin{array}{r} 2832)12848(4 \\ \underline{} \\ 1520)2832(1 \\ \underline{} \\ 1312)1520(1 \\ \underline{} \\ 208)1312(6 \\ \underline{} \\ 64)208(3 \\ \underline{} \\ 16)64(4 \\ \underline{} \end{array}$$

Note, When the numerator and the denominator do each of them end with ciphers, strike off an equal number of ciphers in both, and the remaining figures will be a fraction of the same value, which reduce to its lowest terms.

Rule 2.

To reduce a compound fraction to a single one, multiply all the numerators together for a new numerator, and the denominators for a new denominator. Reduce the new fraction to its lowest terms by the last rule. When it can be done, you may cancel the fractions, by dividing the numerator and denominator of any two terms by the same number, and use the quotient instead.

EXAMPLES.

No. 1. Reduce $\frac{2}{3}$ of $\frac{3}{4}$ of $\frac{9}{10}$ to a single fraction.

Thus $\frac{2}{3} \times \frac{3}{4} \times \frac{9}{10} = \frac{18}{40}$, or $=\frac{9}{20}$, the fraction.

Or, thus $\frac{2}{3}$ of $\frac{3}{4}$ of $\frac{9}{10} = \frac{9}{20}$, as before.

Rule 3.

To reduce whole or mixed numbers into an improper fraction. 1. If the whole number has no assigned denominator, an unit subscribed underneath must be the denominator. 2. If the whole number has an assigned denominator, multiply the whole number by the assigned denominator, and the product will be the numerator to the assigned denominator.

EXAMPLE.—Reduce 27 into a fraction, whose denominator shall be 12.

Thus, $27 \times 12 = 324$. Then, $\frac{324}{12}$, the fraction required.

ADDITION OF VULGAR FRACTIONS.

Rule 1.—To add fractions together, having different denominations, reduce the given fractions to a common denominator.

Add all the numerators together for a new numerator, under which subscribe the common denominator. And if it is an improper fraction, reduce it to its proper terms, and you have the sum of all the fractions.

EXAMPLE.—Add $\frac{2}{3}$, $\frac{1}{4}$, and $\frac{5}{6}$ together.

Thus, $\frac{2}{3} + \frac{1}{4} + \frac{5}{6} = \frac{2 \times 8}{24} + \frac{1 \times 6}{24} + \frac{5 \times 4}{24} = \frac{25}{8}$ or $1\frac{1}{8}$, Answer.

Rule 2.—To add mixed numbers, reduce the fractions to a common denominator, and add them together, as before directed, and annex their sum to the sum of the integers.

EXAMPLE.—Add $4\frac{1}{2}$ and $17\frac{3}{4}$ together.

First, $\frac{1}{2} + \frac{3}{4} = \frac{2}{4} + \frac{3}{4} = \frac{5}{4}$, or $\frac{2}{2} + \frac{3}{4} = \frac{7}{4}$, or $1\frac{3}{4}$.

Then, $4 + 17 + 1\frac{3}{4} = 22\frac{3}{4}$, the sum required.

SUBTRACTION OF VULGAR FRACTIONS.

PREPARE the fractions as before directed in addition, subtract one numerator from the other, and their difference will be a new numerator, under which subscribe the common denominator.

EXAMPLE.—It is required to subtract $\frac{2}{3}$ from $1\frac{1}{4}$.

Thus, $1\frac{1}{4} - \frac{2}{3} = \frac{2 \times 3}{6} - \frac{1 \times 4}{4} = \frac{2}{6}$, or $\frac{1}{3}$, the difference required.

MULTIPLICATION OF VULGAR FRACTIONS.

REDUCE compound fractions to simple ones, per rule 2 bring mixed numbers into improper fractions, per rule 3.

Multiply the numerators together for a new numerator; and the denominators for a new denominator; or, if the fractions will cancel, do it as in rule 2.

EXAMPLE.—Multiply $\frac{2}{11}$ by $\frac{7}{11}$.

Thus, $\frac{2}{11} \times \frac{7}{11} = \frac{14}{121}$, the product required.

DIVISION OF VULGAR FRACTIONS.

PREPARE the fractions as before directed in multiplication.

Multiply the numerator of the dividend into the denominator of the dividing fraction for a new numerator, and multiply the other numerator and denominator together for a new denominator; or invert the divisor, and then proceed as in the last rule.

EXAMPLE.—Divide $\frac{2}{7}$ by $\frac{1}{5}$.

Thus, $\frac{2}{7} \div \frac{1}{5}$ or $\frac{2}{7} \times \frac{5}{1} = \frac{10}{7}$ or $1\frac{3}{7}$, the quotient required.

DECIMAL FRACTIONS.

A DECIMAL FRACTION is a fraction whose denominator is always unity or 1, with one or more ciphers. Thus, an unit may be imagined to be equally divided into 10 parts, and each of these into 10 more; so that, by a continual decimal subdivision, the unit may be supposed to be divided into 10, 100, 1000, and so on without end, all being equal parts, called tenth, hundredth, thousandth parts of unit or 1.

In decimal fractions the figures of the numerator only are expressed, the denominator being omitted, because it is always known to consist of an unit with so many ciphers as there are places in the numerator.

A decimal fraction is distinguished from an integer by a point prefixed, thus .5, which stands for $\frac{5}{10}$, or $\frac{1}{2}$; .75 for $\frac{75}{100}$, or $\frac{3}{4}$; .2752 for $\frac{2752}{10000}$; and 12.010 for $12\frac{10}{1000}$, or $12\frac{1}{100}$, &c.

Ciphers at the right hand of a decimal fraction alter not its value; for .5 or .50 or .5000 are each of them the same value, and are equal to $\frac{5}{10}$ or $\frac{1}{2}$; but ciphers at the left hand, in a decimal fraction, decrease the value in a tenfold proportion, for .05 is $\frac{5}{100}$; also .0005 is $\frac{5}{10000}$, &c.

A finite decimal is that which ends at a certain number of places; but an infinite is that which no where ends. A circulating or recurring decimal is that wherein one or more figures are continually repeated. Thus 64.76666, &c. or 64.7 $\overline{6}$, is called a single circulating or recurring decimal, or

repetend. And 147·642642, &c. or 147·~~6~~42, is called a compound recurring decimal, or repetend.

Note, In all operations, if the result consists of several nines, reject them, and make the next superior place an unit more. Thus, for 17·1999 write 17·2; and for 12·99 write 13, &c.

ADDITION OF DECIMALS.

ADDITION OF DECIMALS is performed after the same manner as addition of whole numbers; care being taken that like parts be placed under one another; and, from their sum or difference, cut off so many decimal parts as there are the most in any of the given numbers.

EXAMPLE.—What is the sum of ·0476, 21·476, ·0067, ·64, 17·6, and ·20764?

$$\begin{array}{r}
 \cdot 0476 \\
 21 \cdot 476 \\
 \cdot 0067 \\
 \cdot 64 \\
 17 \cdot 6 \\
 \cdot 20764 \\
 \hline
 39 \cdot 97794 \text{ Answer.}
 \end{array}$$

To add decimals, wherein there are single repetends, repeat the circulating decimals till each line has an equal number of decimal places, and ends directly under each other, annexing a cipher or ciphers to the finite terms: then add as before; only increase the sum of the right hand row with as many units as it contains nines, and the figure in the sum under that place will be a repetend.

EXAMPLE.—What is the sum of 47·674, 4·02642, 32·~~6~~, 6·14, and 27·064~~6~~?

$$\begin{array}{r}
 47 \cdot 674444 \\
 4 \cdot 026420 \\
 32 \cdot \cancel{6}66666 \\
 6 \cdot 144444 \\
 27 \cdot 064\cancel{6}6 \\
 \hline
 117 \cdot 57664\cancel{4} \text{ Answer.}
 \end{array}$$

SUBTRACTION OF DECIMALS.

SUBTRACTION OF DECIMALS is performed after the same manner as subtraction of whole numbers: care being taken that like parts be placed under one another; and from their

sum or difference cut off so many decimal parts as there are the most in any of the given numbers.

EXAMPLE.—What is the difference between 176 and 10·764?

$$\begin{array}{r} \text{From } 176 \\ \text{take } 10\cdot764 \\ \hline \text{Diff. } 165\cdot236 \end{array}$$

MULTIPLICATION OF DECIMALS.

MULTIPLICATION OF DECIMALS is also performed as in whole numbers, no regard being had to the decimals, as such, till the product is obtained; then observe the following rules. 1. Strike off so many figures from the right hand of the product as there are decimal places in the multiplier and multiplicand. 2. If there are not so many figures in the product, supply the deficiency by prefixing ciphers to the left hand, to make them equal. 3. If the number is to be multiplied by 10, 1000, &c. remove the separating point in the multiplicand so many places towards the right hand as there are ciphers in the multiplier.

EXAMPLE.—Multiply 17504 by 76.

$$\begin{array}{r} 17504 \\ \times 76 \\ \hline \text{Prod. } 1330304 \end{array}$$

DIVISION OF DECIMALS.

IN DIVISION OF DECIMALS the work is likewise performed as in whole numbers: the only difficulty is in valuing the quotient, which will be made easy by observing either of the following general rules: The first figure in the quotient is always of the same value with that figure of the dividend, which answers or stands over the place of units in the divisor. The quotient must always have so many decimal places as the dividend has more than the divisor.

EXAMPLE.—Divide 1735·5 by 6·5.

$$6\cdot5 \overline{)1735\cdot5} (267 \text{ Answer.}$$

REDUCTION OF DECIMALS.

Rule.—To reduce a vulgar fraction to a decimal, add ciphers to the numerator, and divide by the denominator: the quotient will be the decimal fraction required.

EXAMPLE.—Reduce $\frac{1}{4}$, $\frac{1}{2}$, and $\frac{3}{4}$ to decimals.

Thus, $1\cdot00 \div 4 = \cdot25$; and $1\cdot0 \div 2 = \cdot5$; also $3\cdot00 \div 4 = \cdot75$. Ans.

• BOOK-KEEPING.

MUCH has been said on the advantages of keeping accounts after the Italian manner, or by way of double entry; a method which can seldom be made of any use in the ordinary course of business; it has therefore been thought more consistent with the design of this work to omit it altogether, and to give in its place a statement of the more simple method of keeping books by single entry, or by the use of a Waste Book, Ledger, and Cash Book only; which will be found more useful for the common purposes of business.

WASTE BOOK.

The waste book, or, as it is often called, the day book, should be ruled with three lines for the pounds, shillings, and pence, and one marginal line for the folio of the ledger, or cash book; the day of the week, month, and year to be inserted, each day in which any business is done, in the middle of the page. In the waste book should be entered all goods sold and not paid for, with the name of the parties to whom it is sold, in the following manner:

3	<i>Monday, Jan. 1, 1822.</i>			
•	Mr. J. CRAWFORD, High Street.	£.	s.	d.
1	6lb. fine black Tea, at - - 7s. 6d.	2	5	0
	¼ cwt. Sugar, at - - - - 112s.	1	8	0
		3	13	0
	<i>Tuesday, Jan. 2, 1822.</i>			
2	Messrs. COLE & BROWN, Ship Lane.			
	30 pieces fine Irish, 715 yds. at - 4s.	143	0	0
	<i>Friday, Jan. 5, 1822.</i>			
•	Mrs. WILLIAMS, Broad Street.			
3	6lb. Malagas, at - - - - 12d.	0	6	0
1	6lb. Currants, at - - - - 13d.	0	6	6
		0	12	6

LEDGER.

From the waste book every article must be posted into the ledger; and as in the waste book the head or title of each is the day of the week, month, and year; so in the ledger the head or title of every article is the name of the person or firm to whom it was sold: it must be ruled with two separate divisions, the left hand for debtor, and the right for creditor; each division to contain a narrow column for the day of the month on the left hand, then leaving a space for the articles sold, draw a line for the folio of the waste book, or cash book, and to the right of each division, three lines for pounds, shillings, and pence. In posting from the waste book into the ledger, the name of the person or firm must be first written in a large hand at the head of the page; the day of the month, &c. in the first column; the goods sold, in the space between that and the lines of the folio, and the amount carried out to the column for that purpose.

¹ <i>Dr.</i> Mr. J. CRAWFORD, High Street.					<i>Cr.</i>						
1822.		£.	s.	d.	1822.		£.	s.	d.		
Jan. 1.	To goods	3	3	13	0	Jan. 16.	By cash	1	3	13	0

² <i>Dr.</i> Messrs. COLE & BROWN, Ship Lane.					<i>Cr.</i>							
1822.		£.	s.	d.	1822.		£.	s.	d.			
Jan. 2.	To goods	3	14	3	0	0	Feb. 18.	By cash	1	50	0	0

³ <i>Dr.</i>					Mrs. WILLIAMS, Broad Street.					<i>Cr.</i>				
1822.		£.	s.	d.	1822.		£.	s.	d.					
Jan. 5.	To goods	3	0	12	6	Mar. 4.	By cash	1	0	12	6			

CASH BOOK

The cash book must be ruled in the same manner as the ledger, and must contain a debtor and creditor account; the cash must be made debtor for all monies received, and creditor for all monies paid; and it should be balanced regularly once in a week or month, according to the number of entries the business may require.

In the case of a retail shop it is recommended that the money received for all goods paid for on delivery, and not appearing in the waste book, be entered at the close of each day in one sum in the cash book under the name of sundries; but all monies received for goods previously carried to account in the ledger, must be made received in the name of the person or firm who pays it, with the day of the month, &c. in the margin. It must then be posted from thence to the credit of such person or firm in the ledger, with reference to the folio of each, in the same manner as from the waste book. But this may be seen more fully by the following specimen of a cash book entry, connected with the foregoing specimen of a ledger entry.

<i>Dr.</i>	CASH.	CONTRA.	<i>Cr.</i>
1822.	L. s. d.	1822.	L. s. d.
Jan. 1. To Balance -	101 6 8	Jan. 1. House expenses	5 0
16. James Crawford	1 3 13 0	5. House repairs	24 6
25. Sundries - -	5 6 4	25. Carrick & Maclean, on acct.	76 3
Feb. 18. Cole and Brown on account	2 50 0		105 9
Mar. 4. Mrs. Williams	0 12	Balance - -	66 5
25. Sundries - -	4 8 10		
31. Ditto - - -	6		
	171		171 14
April 1. Bal. brought for.	66		

It is necessary here to remark, that in keeping accounts by single entry the cash book will be liable to some entries which are not to be charged to the account of any other person or firm; such as all monies paid for various expenses which exclusively belong, and are incidental to every con-

cern, and also all articles received under the name of sundries. It will be desirable therefore to open an account in the ledger for each of these, by which means every article in the cash book will be posted somewhere; and it will be also seen at one view the amount of expenses for the year. If the money should be paid for goods not posted in the ledger, it will be perfectly satisfactory to enter it in the cash book and refer it from thence to the waste book, without its appearing in the ledger at all.

Besides the incidental expenses, there will often appear on the credit side of the cash book sums of money paid to certain houses for goods bought; these can have no reference to the common ledger, but must be posted in a ledger appropriated to the entry of such goods, commonly called a bought ledger; see an article in the foregoing specimen, "Carrick and Maclean, on account, £76 3s."

In addition to the books already mentioned, it will be also necessary in many instances to keep a bill book, and a separate ledger for the entry of goods bought.

BILL BOOK.

The bill book must be ruled so as to take a particular account of all bills both receivable and payable, such as the time, date, from whom received, to whom payable, &c. that it may be seen at one view what bills have been drawn on you, and when they must be provided for; and also what bills you may have by you drawn on other persons, that they may be presented at proper times, and that you may not lose your claim upon their drawers or accepters by allowing them to remain till overdue. The forms of bills, and some general rules respecting them, will be given elsewhere.

BOUGHT LEDGER.

The ledger for goods bought, must be ruled in the same manner as the other ledger, and the goods you receive at various times must be entered to the credit of the several houses from whom they are bought, copying the amount from the invoices, which of course are previously agreed with the goods actually received; the sum of money paid to such houses will all appear in the cash book when paid, and be posted from thence to the debit of each account.

FORMS OF RECEIPTS.

*When an Apprentice or Servant receives Money for the Use
of his Employer.*

Received the 13th of January, 1822, of Mr. John Barnett,
forty-eight pounds nine shillings and sixpence, for my mas-
ter, Randall Norris,

£48 .9 6

SAMUEL SUMMERS.

Received the 19th of January, 1822, of Mr. John Scott,
nine pounds twelve shillings, on account, for my father,
Joseph Bakewell,

£9 12 0

THOMAS BAKEWELL.

*Forms of Acquittances by Masters and Men of business them-
selves, upon the Receipt of Money.*

Received the 24th of February, 1822, of Messrs. Jones
and Bell, fifty-five pounds five shillings, on account,

£55 5 0

GEORGE BYWATER.

Received February 24, 1822, of Mr. Jonathan Wright,
sixty-nine pounds eighteen shillings, in full of all demands,
for self and partner,

£69 18 0

SAMUEL TILT.

Received the 16th of March, 1822, of John Brown, Esq.
and the owners of the ship Resource, the sum of eighty-five
pounds, in full, for cordage, tackle, and trimming, furnished
the said ship,

£85 0 0

PETER JAMESON.

BILLS OF PARCELS.

Mr. Samuel Newham, *Nottingham, Jan. 19, 1822.*

Bought of Isaac Wild,

	£.	s.	d.
2 Dozen of men's cotton stockings - - - -	2	8	0
2 Dozen fine ditto, at 42s. - - - -	4	4	0
9 Six-thread superfine breeches, at 10s. 6d. - -	4	14	6
6 Four-thread superfine ditto, at 7s. 6d. - -	2	5	0
6 Pair of silk stockings, stout, at 14s. - - -	4	4	0
6 Pair of spup silk stockings, at 5s. 6d. - -	1	13	0
	£ 19	8	6

Mrs. Elizabeth Sumpton, *Liverpool, Jan. 22, 1822.*

Bought of James Bentley,

	£.	s.	d.
16 Ells of dowlas, at 1s. 4d. - - - - -	1	1	4
12 Ells of Holland, at 13s. 4d. - - - - -	8	0	0
25 Yards of Irish, at 2s. 4d. - - - - -	2	18	4
30 Yards of diaper, at 1s. 9d. - - - - -	2	12	6
10½ Yards of damask, at 4s. 6d. - - - - -	2	7	3
1 Piece of muslin - - - - -	2	17	5
	£ 19	16	10

PROMISSORY NOTES.

London, Jan. 1, 1822.

On demand I promise to pay Solomon Greening, Esq. or order, one hundred pounds, value received, with lawful interest on the same,

£ 100 0 0

JOSEPH BROWN.

£ 67 10 0

Oxford, Jan. 1, 1822.

Three months after date I promise to pay Messrs. Grosvenor and Norris, or order, sixty-seven pounds ten shillings, for value received,

At Messrs. Ladbroke & Co.

SAULL & SADDINGTON.

Bankers, London.

Promissory notes payable to order must be endorsed by the parties to whom they are payable, but if payable to bearer, they do not require any endorsement.

If a promissory note on demand be kept by the holder above three days, and the drawer of it should fail, the loss will fall on the holder; but if it be presented and returned within that time, the loss will fall on the person from whom it was received.

BILLS OF EXCHANGE.

BILLS OF EXCHANGE are either inland or foreign. Inland bills are drawn by one trader in one city or town upon another in any part of the same kingdom, and these chiefly concern shopkeepers or wholesale traders, while the foreign more immediately concern the merchants.

It is of great importance that all inland bills of exchange or promissory notes be drawn on the proper stamps, and also without any alterations in the time, date, or names of the parties, as a neglect of either of these particulars will effectually invalidate them in the eye of the law, if it be found necessary to sue the parties for the amount. The following precedents will be found to suit all common occasions; and in drawing bills, care must be taken that the sum in writing agrees with that in figures, as much mischief has often arisen, even from the most trifling irregularities of this nature.

INLAND BILLS.

£50 0 0

Oxford, Jan. 1, 1822.

At sight pay Mr. George Gregory, or order, fifty pounds, for value received,

*Mr. Peter Thornton,
Merchant, London.*

JAMES DAWSON.

£21 6 0

Bristol, Jan. 14, 1822.

Seven days after sight pay to the order of Mr. John Smith, twenty-one pounds, six shillings, value received of Mr. John Grant,

*Messrs. Thomas & Jones,
Milk Street, London.*

DAVID JONES.

£500 0 0

Oxford, Jan. 21, 1822.

Two months after date pay to my order five hundred pounds, value received,

*John Grimshaw, Esq.
Merchant, London.*

JOSEPH GREENING.

FOREIGN BILLS.

London, Jan. 16, 1822.

460 crowns, at 56½d. sterling per crown.

At usance pay this my first bill of exchange (second or third of the same tenor and date not paid) to Mr. Simon Morris, or order, four hundred and sixty crowns, at 56½d. per crown, for value received of Mr. James Adams, as per advice from

*Mr. Samuel White, Merchant.
Amsterdam.*

THOMAS WHITE.

Liverpool, Jan. 24, 1822.

480 dollars, at 55½*d.* per dollar.

At usance and a half pay this my first of exchange to Jonas Fox, Esq. or order, four hundred and eighty dollars, at 55½*d.* per dollar, value received, and place it to account of
Mr. James Horstman, JOSEPH GOODMAN.
Merchant, Cadiz.

Note, Usance between England, France, or Holland, is one calendar month ; between England, Spain, or Portugal, two months ; and between England and Italy, three months.

RULES RESPECTING BILLS OF EXCHANGE.

1. The acceptor of any bill becomes absolute debtor to the person to whom it is payable, or to any subsequent holder, for its contents.

2. The drawer of any bill must give his correspondent a letter of advice that he has drawn such a bill, or such correspondent is under no obligation either to accept or pay it ; and if the bill should be returned, although the party may have effects in his hands, yet all the expenses attending its return will fall on the drawer, for such neglect.

3. The holders of all bills of exchange must see that they are presented for payment on the day they become due, or all the parties through whose hands they have passed, except the acceptor and the drawer, will be completely exonerated from paying them. If the acceptor die before they become due, they must be demanded of the executor or administrator.

4. All bills of exchange, when paid, must have a receipt on the back of them ; the party receiving the money, if receiving it for his own use, need only write the word "received" and sign his name ; if for another person or firm, "received for ———" and also sign his name.

5. It frequently happens, that between the acceptance of a bill and the time of payment, the party to whom it is first made payable has occasion to pay it away : if so, he writes his name on the back of the bill, which is his order, and gives it to the person he is indebted to, and then he is empowered to receive the money : it may be the second person also wants to pay it away, and then he likewise writes his name under the other, and delivers it to a third person to receive the money ; and it may be the third does the same, and delivers it to a fourth person, &c. All that do so are endorser : and he that last has the bill, if the acceptor will not

pay it when due, may sue him, or the endorsers, or drawer, or any of them, for the money.

6. When a bill is dishonoured, the party that holds it may send it to the public notary, whose business it is; and he demands payment, and then, if required, draws up a protest according to law; which is to be returned to the drawer within the time limited.

Note, The protest is not often used except in the case of foreign bills.

MENSURATION.

MENSURATION is of three kinds, lineal, or as it is often called, running measure; superficial or square measure; and solid or cube measure; the first respects length only; the second, length and breadth; and the third, length, breadth, and depth or thickness. It properly belongs to arithmetic, but it is impossible to understand the grounds of its operations without a reference to the first principles of Geometry.

Geometry was originally no more than the art of measuring the earth; but at present it denotes the science of magnitude in general. It had its rise in Egypt, where it was necessary every year to measure the land after the overflowing of the Nile, but in modern times it has been applied with success to Geography, Astronomy, and the higher branches of Arithmetic.

Geometry has magnitude for its object, and treats of the properties of lines, surfaces, and solids.

GEOMETRICAL DEFINITIONS.

A point is that which has no parts or magnitude.

A line is length conceived without breadth.

An angle is the mutual inclination of two lines which meet. An obtuse angle is that which is greater than a right angle. An acute angle is that which is less than a right angle.

Superficies.

A superficies, or surface, is an extension of two dimensions, viz. length and breadth.

A plane, or plane superficies, is that with which a right line may every way coincide.

A plane superficies receives several denominations, according to the number and positions of the lines by which it is terminated ; as follows : A square is a right-angled equilateral parallelogram, whose four sides are equal, and its angles all right ones.—A quadrangle is a figure made by four straight lines.—A parallelogram is a quadrangle whose opposite sides are parallel.—An oblong, or rectangle, is longer than broad ; its opposite sides are equal, and all its angles right ones.—A rhombus, or diamond figure, is a parallelogram whose sides are all equal, but its angles are not right angles.—A rhomboides is an oblique-angled parallelogram, whose opposite sides and angles only are equal.

A triangle is a space included by three lines, and of consequence has three angles ; for every rectilineal plane figure has as many angles as sides. A right-angled triangle is that which has one right-angle. An equilateral triangle is that whose three sides are all equal to each other. An isosceles triangle is that which has only two of its sides equal to one another. A scalene triangle is that which has all its sides unequal. An obtuse-angled triangle is that which has an obtuse angle. An acute-angled triangle is that which has every angle acute.

All right-lined figures, having more than four sides, are called polygons, and receive their names from the number of their sides or angles. Having five sides or angles, it is called a pentagon. A regular polygon is a figure with equal sides and equal angles. A circle is a plane figure bounded by a curve line called the circumference, every part whereof is equally distant from a point within, called the centre. The diameter of a circle is a right line drawn through the centre and terminated by the circumference. The semi-diameter is called the radius. A semi-circle is that part of the circumference of a circle cut off by the diameter. A segment is any part of a circle terminated by an arc. A sector of a circle is a part contained between two right lines or semi-diameters, and the intercepted arc of the circumference. An ellipsis or oval, is a figure bounded by a regular curve line, returning into itself, but its two axis cutting each other in the centre ; one of which is longer (called the transverse axis) than the other (called the conjugate axis).

Solids.

A solid is that which has length, breadth, and thickness.

A cube is a solid bounded by six equal squares.

A **prism** is a solid whose sides are parallelograms, and whose two ends are parallel to each other.

A **cylinder** is a round solid, like the rolling stone of a bowling-green, whose two ends are equal and parallel circles.

A **pyramid** is a solid, whose base is a polygon, or right-lined figure, and whose sides, or triangles, meet in a point, called the vertex.

A **cone** is a round pyramid, or pyramid having a circular base in form like a sugar-loaf.

A **frustrum** of a pyramid or cone is that part which remains, when any part next the vertex is cut off by a plane parallel to the base.

A **pavilion** is a solid contained under five planes; the base is a rectangle or oblong, and the four sides terminate in a ridge, parallel to a side of the base, but unequal to it.

A **prismoid** is a solid contained under six planes; the bases, or ends, are parallel rectangles, and the four sides are quadrangles.

A **sphere** is a solid bounded by a convex surface; every point of which is equally distant from a point within, called the centre.

A **spheroid** is a solid resembling an egg, and is the body conceived to be generated by the revolution of an ellipse about its axis, and is denominated either prolate (oblong) or oblate, according as the revolution is made about the transverse axis or its conjugate. The axis about which the revolution is made is the fixed axis, the other is the revolving axis.

A **parabolic spindle** is eight-fifteenths of its circumscribing cylinder.

GEOMETRICAL PROBLEMS.

Problem 1.

To multiply feet, inches, and parts, by feet, inches, and parts, (which method is termed cross multiplication, but more properly duodecimals;) set the feet in the multiplier under the least denomination in the multiplicand, and the rest in order, beginning with the least denomination; divide each product by 12, as you go on; place the first remainder under the multiplying figure, and the rest in order, adding each quotient to the next arising product, and having finished the multiplication, the sum of all will be the product required.

EXAMPLE.—Multiply 47 feet, 8 inches, by 8 feet, 4 inches.

$$\begin{array}{r}
 \text{feet} \\
 \text{Multiply } 47 \quad 8 \quad 0 \\
 \text{by} \qquad \qquad \quad 8 \quad 4 \\
 \hline
 \quad \quad 15 \quad 10 \quad 8 \\
 \quad 381 \quad 4 \quad 0 \\
 \hline
 \text{Answer, } 397 \quad 2 \quad 8
 \end{array}$$

Problem 2.

To find the area of a parallelogram, whether it be a square, a rectangle, a rhombus, or a rhomboides, multiply the length by the height or perpendicular breadth, and the product will be the area.

If the area of a piece of ground, in yards, is divided by 4840 (the number of square yards in one acre) the quotient will give the number of acres in the said piece; or, if the area in links be divided by 100000 (the number of square links in one acre) the quotient will give acres.

EXAMPLE.—What is the area in acres of a parallelogram, whose length is 14·5 chains, and its breadth 9·75 chains?

Here, $EF = 14\cdot5$, and $EC = 9\cdot75$ chains.

Then, $14\cdot5 \times 9\cdot75 = 141\cdot375 = 141a. 1r. 20p.$ the area required.

Problem 3.

To find the area of a triangle.—1. Multiply one of its sides by the perpendicular let fall upon it from its opposite angle, and half the product will be the area. 2. Multiply the base by half the perpendicular or perpendicular by half the base, and the product gives the area.

EXAMPLE.—How many acres are in a triangular field, whose base is 28, and perpendicular 20·5 chains.

Here, $AC = 28$, and $BD = 20\cdot5$ chains.

Then, $\frac{28 \times 20\cdot5}{2} = 14 \times 20\cdot5 = 287$ acres, Answer.

Problem 4.

To find the area of any regular polygon, let fall a perpendicular from the centre of the figure to one of its sides; then multiply together the perpendicular, the side of the figure, and the number of its sides, and half the product will be the area.

EXAMPLE.—What is the area of a regular pentagon, whose sides are 48 feet, and which measures from the centre to the middle of one of its sides 41·57 feet?

Here, $AB=48$, $CH=41\cdot57$, and $n=5$.

Then, $\frac{48 \times 41\cdot57 \times 5}{2} = \frac{9976\cdot8}{2} = 4988\cdot4$ feet, the area required.

Problem 5.

To find the diameter and circumference of a circle, the one from the other, multiply the diameter by 3·1416, and the product will be the circumference. And therefore divide the circumference by 3·1416, and the quotient will be the diameter.

EXAMPLE.—If the diameter of a circle be 7, what is the circumference?

Thus, $3\cdot1416 \times 7 = 21\cdot9912$, or rather 22, the circumference required.

Problem 6.

To find the area of a circle, multiply half the circumference by half the diameter, and the product will be the area.

EXAMPLE.—How many square feet are in a circle, whose circumference is 6·2832?

$C=6\cdot2832$, $D=\frac{6\cdot2832}{3\cdot1416}=2$, the diameter.

Then, $\frac{6\cdot2832}{2} \times \frac{2}{2} = \frac{6\cdot2832}{2} = 3\cdot1416$, the area.

Problem 7.

To find the solidity of a cube, prism, or right cylinder, multiply the area of the base into the height of altitude, and the product will be the solidity.

EXAMPLE.—What is the solid content of a cube, whose side is 2½ feet?

Thus, $2\cdot5 \times 2\cdot5 \times 2\cdot5 = 15\cdot625$ feet, the solidity.

Problem 8.

To find the surface of a sphere or globe, or of any segment or zone of it, multiply the circumference of the sphere into the diameter or height of the part required: and the product

will be the curve surface, whether it be segment, zone, hemisphere, or the whole sphere.

Note, The height of the whole sphere is its diameter.

EXAMPLE.—What is the surface of a globe, whose diameter is 7?

First, (by *prob. 5.*) $3.1416 \times 7 = 21.9912$, the circumference.

Then $21.9912 \times 7 = 153.9384$, the surface required.

Problem 9.

To find the solidity or content of a sphere or globe, find the superficies by the last problem; multiply the superficies by $\frac{1}{4}$ of the radius, or by $\frac{1}{4}$ of the diameter; or multiply the cube of the diameter by .5236, and the product will be the solidity.

EXAMPLE.—What is the content of a globe, whose diameter is 7?

Thus, $7 \times 7 \times 7 \times .5236 = 179.5948$, the solidity required.

ARTIFICERS' WORK.

GLAZIERS' WORK.

Glaziers' work is usually measured by the foot.

If the windows be square, multiply the length by the breadth, which will produce the content.

EXAMPLE.

$$\begin{array}{r}
 \text{feet in.} \\
 8 \ 9 \text{ high} \\
 7 \ 3 \text{ broad.} \\
 \hline
 56 \ 0 \\
 2 \ 0 \\
 5 \ 3 \\
 \quad 2\frac{1}{4} \\
 \hline
 63 \ 5\frac{1}{4}
 \end{array}$$

$$\begin{array}{r}
 \text{feet in.} \\
 8 \ 9 \\
 \hline
 7 \text{ feet, } 3\frac{1}{4} \text{ inches.} \\
 61 \ 3 \\
 3 \text{ inches } \frac{1}{4} \quad 2 \ 2\frac{1}{4} \\
 \hline
 63 \ 5\frac{1}{4}
 \end{array}$$

If the windows be arched, or have a curved form, no allowance is made in charging, although they are actually less in measure, by reason of the extraordinary trouble and waste of time, expense, or waste of glass, &c. and the

dimensions taken from the highest part of the arch, down to the bottom of the window, from the height or length; which multiply by the breadth, and the product will be the answer in feet, &c.

PAINTERS' WORK.

Painters' work is usually measured by the yard.

When the wainscot of a room is painted, the room must be measured with a line, and the height taken by girding a string over all the mouldings from the top of the cornice to the floor: then multiply the compass by the height, and you have the content in feet and inches; which may be reduced into square yards by dividing by 9.

EXAMPLE.

How many square yards are there in the painting of a room which is 45 feet 8 inches in compass, and 10 feet 6 inches high?

$$\begin{array}{r}
 \text{feet in.} \\
 45 \quad 8 \text{ in compass.} \\
 10 \quad 6 \text{ high.} \\
 \hline
 456 \quad 8 \\
 22 \quad 10 \\
 \hline
 9 \overline{)479} \quad 6 \\
 \hline
 \text{Yards } 53 \quad 2 \quad 6 \text{ Answer.}
 \end{array}$$

JOINERS' WORK.

In wainscoting, the dimensions are taken as in painting, that is, by measuring the height and the compass; which multiply one into the other, dividing the product by 9; and the quotient is the answer in square yards.

EXAMPLE.

What is the content of a piece of wainscoting that is 9 feet 3 inches long, and 6 feet 6 inches broad?

$$\begin{array}{r}
 \text{feet in.} \\
 9 \text{ feet } 3 \text{ inches is } \frac{1}{4} - 2 \overline{)9} \quad 3 \\
 \hline
 6 \text{ feet } 6 \text{ inches.} \\
 55 \quad 6 \\
 4 \quad 7 \frac{1}{2} \\
 \hline
 9 \overline{)60} \quad 1 \frac{1}{2} \\
 \hline
 6 \text{ yards, } \frac{1}{3}, \text{ Answer.}
 \end{array}$$

CARPENTERS' WORK.

Roofing, flooring, and partitioning, by the principal carpenters, in modern buildings, are measured by the square of 10 feet each way, that is 100 square feet.

For roofing, multiply the depth and half depth by the front, or the front and half front by the depth, and you will have the content.

The dimensions are taken in feet and inches."

EXAMPLE.

How many squares does a piece of work contain that measures 109 feet 10 inches in length, and 10 feet 7 inches in height?

	<i>feet</i>	<i>in.</i>
	199	10 <i>long</i>
		10 <i>feet 7 inches high.</i>
	1998	4
6 inches $\frac{1}{2}$	99	11
1 inch $\frac{1}{8}$	16	7 $\frac{1}{2}$
	21	14 10 $\frac{1}{2}$

The division is performed by pointing off two places towards the right hand, and the number on the left is the squares, &c.

Answer, 21 squares, 14 feet, 10 $\frac{1}{2}$ inches.

SAWYERS' WORK.

Sawyers' work is measured by the superficial foot, and paid for by the hundred, that is, 100 feet; the depth of the kerf is reckoned for the breadth, and the length for the length. The dimensions being taken in feet, the content of feet one kerf superficial may be found by multiplying the length by the breadth, and then having found the number of feet in one kerf, multiply it by the number of kerfs of the same dimensions, and you will have the number of feet in them all,

BRICKLAYERS', TYLERS', AND SLATERS' WORK.

Walling is measured by the rod statute-measure, being 272 feet and $\frac{1}{4}$ superficial. The method of taking the dimensions is thus: measure the length by a line going over the

buttresses ; and for the height, measure over the mouldings, pressing the line into them even to the middle of the coping : the thickness of the wall is calculated by the number of half bricks in length the wall is in thickness ; for three half bricks, that is, a brick in length and one in breadth, is the standard thickness : and all walls, whether less or more, must be reduced to that thickness, by the rule following :

Multiply the product of the length and height by the number of half bricks that the wall is in thickness ; which product divide by 3, and then the quotient by 272 (the $\frac{1}{2}$ being generally neglected in common working) and the quotient will be rods, at a brick and a half thick, standard measure.

EXAMPLE.

Admit the face of a wall to measure 4085 feet, and the thickness to be two bricks and a half, or five half bricks, how many rods does it contain ?

$$\begin{array}{r}
 \text{feet} \\
 4085 \\
 \times 5 \\
 \hline
 3)20425 \\
 272)680825 \text{ rods, Answer.} \\
 \quad 544 \\
 \quad \hline
 \quad 1368 \\
 \quad \hline
 \quad 1360 \\
 \quad \hline
 \quad \quad 8
 \end{array}$$

Tylers' and Slaters' work is valued by the square of 100 feet ; in some places by the rod of 18 feet square ; that is, 36 square yards, or 324 feet.

Masons' work, consisting of stone, is of two sorts, namely, superficial and solid. Pavements, and the face of stone walls, houses, &c. are measured as brick-work. If the work have ornaments, as capitals, pilasters, rails, balusters, &c. then they are valued by the piece.

LAND MEASURE.

Land is usually measured by the acre. The dimensions are taken with a chain of four poles in length, which is

divided into a hundred parts, called links; and ten square chains make an acre. But to find the content (if not regularly square) it is generally divided into triangles; thus a piece of land of 4 sides (if not square) may be divided into two triangles; pieces of 5 sides into 3, &c. but if square, it is measured as a regular parallelogram. *See problem 2.*

All other pieces of land must be divided into triangles, each of which must be measured and their contents added together. *See problem 3.*

TIMBER MEASURE.

To find the solid content of a tree, it must first be girted, and one-fourth part taken for the side of the square, then multiply the length of the side of the square in inches into itself, and that product by the length in feet; which last product divide by 144: but if you multiply by the length in inches, then the divisor must be 1728, and if any thing remain, divide such remainder by 12, and the quotient will be the odd inches.

EXAMPLE.

Suppose a piece of timber 15 feet long, and a quarter of the girt 42 inches; what is the content of that piece?

in. in. feet

$42 \times 42 = 1764 + 15 = 26460 \div 144 = 183 \text{ feet, } 9 \text{ in. Answer.}$

GAUGING.

There is some sort of affinity between measuring timber and gauging or measuring liquors. In both cases the number of solid or cubic inches is first found; and in gauging the number of gallons is afterwards found by dividing by 282 if beer or ale, and by 231 if wine measure.

To gauge a copper, tub or cask, if it be wider at the top than the bottom, take the diameter somewhat above the middle; or if it be unequal, find the mean diameter of the bung and the head; then square the mean diameter, and multiply that square by .7854 and the product will give the content at one inch deep; which, multiplied by the length, will give the number of solid inches.

EXAMPLE.

What is the content of a cask whose mean diameter is 72 inches, and length 56 inches?

$$72 \times 72 = 5184 \times .7854 = 4071.5136 \times 56 = 228004.7616 \div 282 = 808\frac{1}{2} \text{ gallons, Answer.}$$

EXTRACTION OF THE SQUARE ROOT.

EXTRACTING the square root is finding out such a number, as, being multiplied into itself, the product will be equal to the given number.

As the square root of 81 is 9, consequently, $9 \times 9 = 81$ the given number, as in the following table.

Table.

Root.	1	2	3	4	5	6	7	8	9
Square.	1	4	9	16	25	36	49	64	81

To extract the square root of any number, observe the following rules :

1. Point the given number or resolvend into periods of two figures each, beginning at the unit's place.

2. Find by the table the greatest square number that is contained in the first period towards the left hand, placing the square number under the first period, and the root of it in the quotient (as in division;) subtract that square out of the said period, and to the remainder bring down the next period for a dividend.

3. Double the quotient or root, and place it for a divisor, seek how often the divisor is contained in the dividend (reserving always the unit's place) and put the answer in the quotient, and also on the right hand of the divisor. Then multiply the divisor by the last figure put in the quotient (as in common division) the product subtract from the dividend, and to the remainder bring down the next period, which proceed with as before.

Note, But if it happen that the given resolvend is not a perfect square, cube, &c. then something will remain after extraction has been made throughout all the points. When this is the case, you must annex ciphers, according as the

proposed power requires, namely, by pairs or two's in the square; three's in the cube, &c.; and the operation is continued as before. If the given resolvend consists of a whole number and decimals together, make the number of decimals even by adding ciphers to them.

EXAMPLE.

It is required to extract the square root of 74770609.

$$\begin{array}{r}
 74770609 \text{ } 8647 \text{ the root.} \\
 64 \\
 166 \overline{) 1077} \\
 \underline{996} = 166 \times 6 \\
 1724 \overline{) 8106} \\
 \underline{6896} = 1724 \times 4 \\
 17287 \overline{) 121009} \\
 \underline{121009} = 17287 \times 7
 \end{array}$$

Proof thus, $8647 \times 8647 = 74770609.$

USE OF THE SQUARE ROOT.

To find the side of a square equal in area to any given superficies, extract the square root of the given superficies which root will be the side of the square sought.

EXAMPLE.

If the area of a given circle is 4276.5, what is the side of a square whose superficial content shall be equal to it?

Thus, $\sqrt[3]{4276.5} = 65.4$ nearly.

EXTRACTION OF THE CUBE ROOT.

To extract the cube root is to find out a number, which being multiplied into itself, and then again into the product, produces the given number.

As the cube root of 729 is 9, consequently $9 \times 9 \times 9 = 729$ the given number, and so of others, as in the following table.

Table.

Roots.	1	2	3	4	5	6	7	8	9
Cube.	1	8	27	64	125	216	343	512	729

Make a point over every third figure given, beginning at the unit's place; seek the greatest cube to the first point on the left hand (by the table) whose root place in the quotient; then subtract its cube from the period, and to the remainder (if any) bring down the three figures, or your next period, and call it your dividend.

Find a divisor, by calling your quotient figure, with a cipher joined to it, r ; then three times the square of r will be your divisor; seek how often it is contained in the dividend, and put the answer in the quotient as in division, only with this difference, call the said quotient figure last put up e , and multiply your divisor by it, and place the product underneath the dividend: then multiply the square of e by three times r , and place it under the dividend; lastly, cube the figure you call e , and place it under the dividend; then add the three products together, and it gives the subtrahend, which subtract from your last dividend, and to the remainder bring down the next period, and proceed as before.

EXAMPLE.

What is the cube root of 21024576?

21024576 (276 the root.

8

$3rr = 1205 \overline{)13024}$

8400 = $3rre$

2940 = $3rre$ } Here $r = 20$, and $e = 7$.

343 = eee

11688 Subtrahend.

$3rr = 218700 \overline{)1341576}$ Dividend.

1312200 = $3rre$

29160 = $3ree$ } Here $r = 270$, and $e = 6$.

216 = eee

1341576 Subtrahend.

USE OF THE CUBE ROOT.

To find the side of a cube that shall be equal in solidity to any given solid, as a globe, cylinder, prism, cone, &c. extract the cube root of the solid content of the given body, which root will be the side of the cube required.

EXAMPLE.

Suppose a stone of a cubic form, which contains 219 solid feet; what is the superficial content of one of its sides ?

First, $\sqrt[3]{21952}=28$, *side of the cube.*

Then, $28 \times 28 = 784$, *the content required.*

PART IV.

GEOGRAPHY.

GEOGRAPHY is a science which describes the earth and its parts, and may be taken in a twofold sense, either as universal, relating to the earth in general; or special, as bearing reference to any particular part of it.

The relation which Geography bears to Astronomy is well known. It is therefore no wonder that the ancients, with all the genius and penetration we may be inclined to allow them, should not attain to the same degree of knowledge with the moderns, when we consider that they were not assisted by the same helps. The moderns, in the discovery of America, have opened a passage to a New World, which was entirely unknown to the ancients; and those parts of the Old World which our forefathers thought uninhabitable, have been found to be inhabited; their torrid zone has been found to be temperate, it being refreshed by showers, constant breezes, and cold nights, by the direct setting of the sun, and the interposition of the whole body of the earth.

GEOGRAPHICAL DEFINITIONS.

A **CONTINENT** is a large portion of the earth, which comprehends several countries that are not separated by any sea.

An **ISLAND** is a part of the earth which is entirely surrounded by water: as Great Britain, Ireland, &c.

A **PENINSULA** is a quantity of land which is joined to a continent only by a narrow slip or neck of the same, it being on every other part encompassed by water: as the Peninsula of California, in North America.

An **ISTHMUS**, or neck of land, is that part by which a peninsula is joined to a continent: as, by the Isthmus of Suez, Africa and Asia are joined together.

A **PROMONTORY**, or **CAPE**, is a high part of land, which advances, or stretches into the sea: as the Cape of Good Hope, in the south of Africa.

An **OCEAN** is a vast collection of waters surrounding a considerable part of the continent: as the Atlantic Ocean.

A **SEA** is a smaller collection of waters: as the British and Irish Seas.

A **GULF** is a part of the sea which is nearly surrounded with land: as the Gulf of Venice, in Europe; and the Persian Gulf, in Asia.

A **BAY** has a wider entrance than a gulf: as the Bay of Biscay.

A **STRAIT** is a narrow passage that joins two seas: as the Straits of Gibraltar, which join the Mediterranean Sea to the Atlantic Ocean.

A **LAKE** is a large collection of water entirely surrounded by land, having no visible communication with the sea: as the Caspian Lake or Sea, in Asia; Lake Ontario, in North America, &c.

GENERAL DESCRIPTION OF THE EARTH.

THE figure of the earth is round. This might have been always known from the shadow of the earth in an eclipse of the moon; but it was first completely ascertained by Magellan, a native of Portugal, in the service of Spain, who sailed round it.

The round figure of the earth may also be inferred from the appearance of objects at sea; and from the observation of the stars. The roundness of the earth is occasioned by every thing on it being attracted to its centre, which is called gravitation or attraction. Mountains bear no sensible proportion to the bulk of the earth, and are therefore to be considered as trifling inequalities on its surface.

The earth has two motions; the one round the sun in the space of a year, which occasions the diversity of seasons; and the other round its own axis from west to east in the space of 24 hours, which produces day and night.

The earth is surrounded by a thin elastic fluid, which revolves with it in its diurnal and annual motion, called the Atmosphere.

As air is not of an equal density, the height of the atmosphere cannot be exactly determined; for the density of air decreases with its pressure, and the higher we ascend, the more rarefied and expanded it will be; by which means the height of the atmosphere becomes indefinite, and at last terminates in pure ether. Although no philosopher has been able to assign the real height of the atmosphere, it nevertheless appears probable, that 45 or 50 miles is the utmost height where the density is sufficient to refract a single ray of light: and, therefore, it may be accounted the altitude of the atmosphere, to the least sensible degree of density.

The atmosphere is a perfect chaos of different effluvia, consisting of all kinds of corpuscles (minute particles of matter) confusedly jumbled together, and constituting one mass. Water, fire, volatile salts, oils, &c. are blended together in different proportions in the atmosphere, which varies according as the more light or more ponderous as these constituent parts prevail.

The celebrated Ferguson, speaking of a common mistake concerning the weight of air, says, " Oftentimes the state of the air is such, that we feel ourselves languid and dull; which is commonly thought to be occasioned by the air's being foggy and heavy about us. But that the air is then too light is evident from the mercury's sinking in the barometer, at which time it is generally found, that the air has not sufficient strength to bear up the vapours which compose the clouds: for, when it is otherwise, the clouds mount high, and the air is more elastic and weighty about us, by which means it balances the internal spring of the air within us, braces up our blood-vessels and nerves, and makes us brisk and lively."

In order to form an idea of the weight of the whole atmosphere upon the earth's surface, we may proceed in the following manner: Suppose the diameter of the earth to be 8000 miles, in round numbers, the quantity of square miles on the surface of the earth will be 201,065,600; but as our supposition made the diameter somewhat too large, we may, in return, take the number of square miles on the surface somewhat less, and, accordingly, we shall make use of the round number 200,000,000 square miles for the space which covers the earth's surface: in one square mile there are 27,878,400 square feet; therefore, on the earth's surface we have 5,575,680,000,000,000 square feet, which being multiplied by 2660 pounds, the pressure of the

atmosphere on each square foot, the result will be 14,831,308,800,000,000 pounds for the weight of the whole atmosphere.

Notwithstanding the innumerable conveniences we receive from the atmosphere, were it not for its refractive power, the earth would not be that beautiful scene it now appears. It is the atmosphere that makes the firmament appear lucid and bright while the sun shines; for if the earth were not surrounded by an atmosphere, only that part of the heavens in which the sun is placed would appear to shine. In such a case as this, if a spectator were to turn his back to the sun, he would behold nothing but darkness before him: and even in the day-time, during the shining of the sun, the least stars would be seen as plain as in the darkest night, because there would be nothing to reflect the sun's rays to our eyes; and all the rays that do not fall upon the surface of the earth passing by us, would either illuminate the planets and stars, or, spreading themselves out in infinite space, would never be reflected back to us. But as an atmosphere surrounds the earth, which is strongly illuminated by the sun, it reflects the light back to us, and causes the whole firmament to shine with such splendour, so as to obscure the faint light of the stars, and render them invisible. If there were no atmosphere, the sun would shine as bright as at noon just before his setting: and the moment he got below the horizon, all that part of the earth would be involved in darkness. The same phenomena would also attend his rising. But how inconvenient would such sudden transitions, from the greatest darkness to the greatest light, prove to the inhabitants of the earth! This inconvenience is entirely removed by the atmosphere: for though after the setting of the sun we receive no direct light immediately from him, yet the all-wise Providence has so ordered it, that we enjoy his reflected light for a considerable time; so that the darkness of the night comes gradually on. In the morning also, as soon as the sun rises within 17 deg. 30 m. of the horizon, he begins again to enliven the atmosphere, and to diffuse his light through the heavens; its brightest increasing by degrees, till the sun rises, and makes a full day.

As the air is a fluid, its natural state is undoubtedly that of rest, which it endeavours always to keep or retrieve by an universal equilibrium of all its parts. When this equilibrium of the atmosphere, happens to be destroyed in any

part, there necessarily follows a motion of all the circumjacent air towards that part to restore it ; and it is this motion of the air which philosophers have denominated Wind. With respect to that place where the equilibrium of the air is disturbed, we observe, that the wind may blow from all points of the compass at the same time ; those who live northward of that point have a north wind, those who live southward, a south wind, &c. but those who live on the spot where all those currents of air meet, are generally oppressed with boisterous weather, with whirlwinds and hurricanes, with rain, lightning, and thunder ; for the sulphureous exhalations from the south, the torrents of nitre from the north, and the aqueous vapours from every part, being here blended together, seldom fail to produce the above-mentioned phenomena.

Wind may be produced by a variety of causes ; but the most general are these two, heat and cold. Heat rarefies and expands the air, making it lighter in some places than it is in others ; and cold, by condensation, makes it heavier.

As the motion of the air has a greater or less velocity, the wind is stronger or weaker ; and from observation it has been found, that the velocity of the wind is various, it being perceived to be from one to fifty or sixty miles per hour.

The inhabitants of the earth are distinguished by geographers, according to the several meridians and parallels of latitude under which they live, and are denominated either *Periæci*, *Antæci*, or *Antipodes*.

The *Periæci* are those who live under the same parallel of latitude ; but opposite meridians ; the lengths of their days and nights are the same, as their seasons are, because they are situate at the same distance from the equator ; but when it is noon-day with the one it is midnight with the other, there being twelve hours between them in either an eastern or western direction.

The *Antæci* are those who lie under the same meridian, but opposite parallels. These also are equidistant from the equator, but the one is in south latitude, and the other in north latitude. The *Antæci* have the same noon-day, but the longest day with one is the shortest day with the other ; consequently when it is summer with one it is winter with the other. The length of the day with one is also equal in length to the night of the other.

As to the *Antipodes*, they are placed in diametrically opposite situations to each other ; the feet of the one being

directly opposite to the feet of the other : they lie under opposite parallels and opposite meridians : when it is midnight with the one, it is noon-day with the other : the longest day with one is the shortest day with the other : and the length of the day with one, is equal to the length of the other's night : their seasons also are opposite ; for when it is summer with the one it is winter with the other.

Geographers divide the earth into four large portions of land, called quarters ; namely, EUROPE, ASIA, AFRICA, and AMERICA.

EUROPE.

EUROPE is the smallest of the four divisions or quarters of the world, but it is inhabited by the most active and intelligent race of mankind.

Europe comprehends, Lapland, Norway, Sweden, Russia, Denmark, Prussia, Batavia or Holland, the German States, Austria, Turkey, France, Switzerland, Italy, Portugal, Spain, and the United Kingdom of Great Britain and Ireland.

Its three grand inland seas are, the Mediterranean, the Baltic, and the White Sea : the part of the Mediterranean which lies east of Candia is frequently called the Levant.

The principal European islands are, Great Britain and Ireland, Iceland, Zealand, Corsica, Sardinia, Sicily, Candia, Ivica, Majorca, and Minorca.

The principal rivers in Europe are, the Wolga, the Danube, the Nieper, the Rhine, the Elbe, and the Thames.

The most elevated mountains are, the Alps, which separate Italy from Germany, Switzerland, and France ; the Pyrenees, between France and Spain ; the Dofrafeld Mountains, between Norway and Sweden ; and the Capertbian Mountains, which bound Hungary to the north and east.

The principal capes in Europe are, North Cape, the Naze, the Land's End, Capes La Hogue, Finisterre, St. Vincent, and Matapan.

LAPLAND.

Lapland is divided into Danish, or North Lapland ; Swedish, or South

Russian, or East Lapland.

It is covered with immense forests, chiefly of fir, and with pastures full of rein-deer.

The Laplanders are hospitable, generous, and courageous: their amusements are, shooting with the bow at a mark; a kind of tennis: and a game resembling draughts. They make long excursions upon the snow, and will, without much fatigue, travel fifty miles a day: and in their sledges, drawn by rein-deer, they will occasionally pass over hill and dale, two hundred miles in the same time.

In some parts of Lapland the sun is absent about seven weeks at a time. The stars are visible at noon, and the moon shines without intermission. In the summer, on the contrary, the sun never sets for seven weeks together.

NORWAY.

NORWAY was dependent upon Denmark, and they were united under one sovereign in 1387; but it has recently been annexed to Sweden.

Norway is divided into four general governments, namely, Aggerhuus, Bergen, Drontheim, and Wardhuus.

The chief towns of Norway are Christiana and Bergen.

Norway is the most mountainous country in the world; the rivers and cataracts, which intersect the mountains, render travelling exceedingly dangerous. The inhabitants have neither corn fields nor gardens, but they subsist chiefly by hunting and fishing. On the coast of Norway is the famous vortex of the sea called Mælstroom: it is heard at a great distance, and forms a whirlpool of vast depth and extent, and is so violent, that if a ship comes near it, it is drawn in and shattered to pieces.

The chief wealth of Norway lies in its fir timber, with which foreign nations are supplied. It possesses quarries of excellent marble, and mines of various metals.

DENMARK.

DENMARK PROPER is an exceedingly small kingdom, containing only the peninsula of Jutland, and the islands of Zealand, Funen, &c. at the entrance of the Baltic.

Its chief town, Copenhagen, is in the island of Zealand. At Elsinore, all foreign ships that trade to the Baltic pay toll.

That part of the sea situate between Zealand and Funen is called the *Great Belt*; and that which divides Funen from the continent of Denmark, is called the *Little Belt*.

Iceland, an island in the northern seas, which is subject to Denmark, abounds in sulphur, subterraneous fires, and volcanoes. In mount Hecla is a volcano, a mile high, the top of which always is covered with snow.

Greenland and the Ferroe Islands are subject to Denmark. The coast of Greenland is famous for the whale fishery.

SWEDEN.

SWEDEN, including the greater part of ancient Scandinavia, is divided into Sweden Proper, Gothland, Finland, Swedish Lapland, and the Swedish islands.

The chief towns are, Stockholm, the capital, which stands on seven rocky islands, united by wooden bridges; Upsal, famous for its university; Gothenburgh, in Gothland; Tornea, in West Bothnia, and Abo, in Finland.

The chief wealth of Sweden arises from its mines of silver, copper, lead, and iron. The mines are very spacious; and affording commodious habitations for numerous families, they seem to form a subterraneous world.

Sweden is a mountainous country, and is celebrated for the number and extent of its lakes. Its rivers are numerous, but not navigable; almost all of them rise from the mountains in Norway.

Sweden and Swedish Lapland abound with natural curiosities, and with singular and truly sublime scenery. The islands about the lakes and gulfs, on the coast of the Baltic, are so numerous, that several thousands of them are supposed to be inhabited, and the rest are desert rocks. In the Baltic Sea there are no tides; and a current is always running into the German Ocean.

RUSSIA.

THE RUSSIAN EMPIRE, the largest in extent in the world, comprehends all the northern parts of Europe and Asia, but only a small part even of its scanty population is in a state of civilization. By the partition of Poland, in the year 1772 and 1793, Russia acquired two-thirds of that country, and about six millions of subjects. In some parts of this country the climate is so severe, that icicles are frequently seen hanging to the eyes, and the drivers of carriages are often found frozen to death on their seats.

The principal towns are, Petersburg, the capital, on the Gulf of Finland; Moscow Archangel, on the borders of

the White Sea; Cherson, on the Black Sea; Astrachan, near the Caspian; and Tobolsk, the capital of Siberia. Petersburg, built since 1700, contains about 170,000 inhabitants.

The principal lakes are Ladoga and Onega. The chief islands are Cronstadt, in the Gulf of Finland; Oesel, and Dago, famous for their rocks, and inhabited by Estonians.

Russia is mostly a level country: from Petersburg to Pekin in China there is scarcely a hill; the same may be said of the road from Petersburg to the north of France.

The principal rivers are the Wolga, which, after winding a course of three thousand miles, discharges itself into the Caspian Sea by more than seventy mouths; the Don or Tanais, the Nieper, and Neister.

The inland navigation of Russia is very extensive; goods may be conveyed by water from Petersburg to China, with an interruption of only sixty miles. Russia is celebrated for its timber and flax trade, its iron and copper mines in the Uralean Mountains, and its fisheries.

Among the natural curiosities of Russia must be mentioned the rocks of ice, of many miles in extent, and astonishing height, which are found in the Frozen Ocean, adorned like cathedrals with pinnacles which reflect every variety of colours in the sun.

PRUSSIA.

THE PRUSSIAN DOMINIONS were formerly very small; but the acquisition of Silesia and a part of Poland, and the abilities of Frederic the Great, rendered them a considerable empire. It is divided into Royal Prussia, and Ducal Prussia. Royal Prussia lies on the west side of the Vistula, and Ducal Prussia on the east.

Before the partition of Poland, the Prussian subjects amounted to about five millions and a half, but afterwards to eight millions.

The chief towns are, Berlin, the capital; Konigsberg, and Breslaw; Warsaw, the former capital of Poland; and Dantzic, a celebrated independent city and sea-port.

The principal rivers are the Vistula the Pregel, and the Memel.

BATAVIA.

THE DUTCH are proverbially characterized by their industry and economy, and they were formerly distinguished for their love of liberty.

Batavia consists of seven provinces, namely, Groningen, Griesland, Overysse, Holland, Utrecht, Guelderland, and Zealand.

The French, taking advantage of the divisions among the Dutch, overthrew and enslaved their once flourishing and independent republic, and Buonaparte created it into a kingdom, over which he placed as sovereign his brother Louis; but Holland has at length, with the rest of the nations of Europe, recovered its independence.

The chief towns are Amsterdam, Leyden, Rotterdam, and Haarlem. The Hague is the largest, and was the richest *village* in the world; it is thirty miles from Amsterdam, and was, before the late revolutions, the seat of government, and the residence of the principal people. Amsterdam, the capital, is curiously built upon wooden piles. Leyden is famous for its university. The streets of Holland have canals running through them, the borders of which are planted with rows of trees.

The principal rivers are the Rhine, the Mæse, and the Scheldt.

The canals are very numerous, and serve for the same purpose as roads in other countries, namely, travelling and the conveyance of goods.

GERMANY.

GERMANY is remarkable for its subdivisions into an immense number of independent states, which were all, for many ages, politically united.

Germany is divided into nine great divisions, called circles: three northern, namely, Westphalia, Lower Saxony, and Upper Saxony; three in the middle, Lower Rhine, Upper Rhine, and Franconia; and three southern, Saxony, Bavaria, and Austria.

These circles are subdivided into principalities, duchies, electorates, bishoprics, &c. Besides these there are a number of free cities, which are sovereign states. Almost every prince of Germany, of which there are about two hundred, is arbitrary in the government of his own estate; but together they used to form a great confederacy, governed by political laws.

In 1806 the constitution of the Germanic empire was set aside by the intrigues of the French. The Emperor of Austria relinquished the title of Emperor of Germany; and a new political association was formed of many considerable

states, under the title of the Confederation of the Rhine; at the head of which, under the title of Protector, was the Emperor of the French: but this Confederation is now at an end.

The Kings of Prussia and Saxony are at present regarded as the principal potentates in the north of Germany; and the Kings of Bavaria and of Wirtemberg are the most considerable in the south.

Its chief towns are Vienna, the residence of the Emperor of Austria; Dresden, the residence of the King of Saxony, famous for its gallery of pictures, its various collections in the fine arts, and its porcelain manufactory; Berlin, the capital of the Prussian dominions; Hamburgh, situate on the Elbe, one of the first commercial cities in Europe; Leipsic and Frankfort, famous for their fairs; Gottingen, Jena, Leipsic, and Halle, celebrated for their universities; besides Hanover, Munich, Manheim, Wirtemberg, Heidelberg, Augsburgh, Constance, and Prague.

The principal rivers of Germany are the Danube, the Rhine, the Maine, and the Elbe.

THE AUSTRIAN DOMINIONS.

THE EMPIRE OF AUSTRIA comprehends Austria, Bohemia, Hungary, and part of Poland. They contain twenty millions of inhabitants.

By the partition of Poland, Austria acquired one-sixth part of that country, and more than four millions of subjects. The capital of this vast and compact military empire is Vienna; the other chief towns are Prague, Presburg, Buda, and Cracow.

The principal mountains are, the Tyrolese, The Alps, and the Carpathian.

TURKEY IN EUROPE.

TURKEY IN EUROPE includes ancient Greece, and other countries, formerly the finest in the world, but owing to the despotism and ignorant policy of the Turks, now the most desolate and miserable.

The government is under the Grand Signior, who is master of the lives and property of his subjects. He assumes the titles of God upon Earth: the Shadow of God; Brother of the Sun and Moon, &c.

The northern provinces are, Moldavia, Bessarabia, Wal-

Iachia, Servia, Bosnia, and Dalmatia; those in the middle, Bulgaria, Romania, Macedonia, Albania, and Epirus; the southern part, called Greece, contains Thessaly, Achaia, and the Morea. The famous city of Delphos is now reduced to a mean village called Castri.

The metropolis of Turkey is Constantinople, finely situated between the Sea of Marmora and the Black Sea, and still one of the most considerable cities in Europe. Adrianople is the second city in the Turkish empire, and was formerly the capital.

The principal rivers are, the Danube, the Save, and the Neister.

The chief mountains are Pindus and Olympus, which separate Thessaly from Epirus; Parnassus, in Lavidia; Athos, and Hæmus. Athos is celebrated for its loftiness, and is now inhabited by thousands of monks and hermits.

The islands are very numerous; the chief are Rhodes, and Candia, in the Mediterranean; there are also Zante, Cephælonia, Corfu, and others, lying west of Turkey, forming the new republic of the Seven Islands.

FRANCE.

FRANCE, rendered conspicuous by the bloody progress and disgraceful termination of its revolution, stands in a commanding situation in the centre of Europe; and is distinguished for the military prowess of its armies, and for the restless activity and volatile character of its inhabitants.

The government of France has undergone many changes. It was for a time usurped by Napoleon Buonaparte, a military adventurer, who assumed the titles of Emperor of France, King of Italy, &c. but it is now for the present governed by one of its native princes, with the title of Louis XVIII.

The climate of France is various; but the transitions from heat to cold, and from rain to fair weather, are less sudden than those experienced in England. In the interior the air is very salubrious; in the northern parts, the winters are intensely cold; but in the south, they are so mild, that invalids retire thither from England, to avoid the rigour of the climate.

France was anciently divided into provinces; but since the revolution, it has, with the Netherlands and various other territories acquired by the revolutionary war, been divided into one hundred and fifteen departments.

Paris, the capital of France, is next to London, the

largest and most considerable city in Europe. It contains about five hundred thousand inhabitants; and has lately been enriched with immense collections of works of art, ancient and modern.

The other principal towns of France are, Lyons, Marseilles, Bourdeaux, Lisle, and Geneva, the last formerly an independent state.

The principal mountains in France are, the Alps, which anciently divided it from Italy; and the Pyrenees, which divide it from Spain.

The chief rivers are, the Rhone, the Garonne, the Loire, the Seine, and the Somme. The Rhine forms the boundary between France and Germany.

The canals in France are very numerous; the chief work of this kind is the canal of Languedoc about one hundred and eighty miles in length.

Near Toulon are the isles of Hieres, which are the same as Homer's isle of Calypso; the isle of Rhe is opposite Rochelle. Belleisle has been repeatedly attacked by the English. The isle of Ushant is the most westerly headland in France.

SWISSERLAND.

SWISSERLAND, remarkable for its mountains and the simple character of its inhabitants, is divided into thirteen cantons; Zurich, Berne, Underwalden, Zug, Schweitz, Basil, Glaris, Soleure, Uri, Appenzel, Lucerne, Fribourg, and Schaffhausen.

The principal towns are Basil, Berne, Zurich, and Lausanne, the last celebrated for the beauty of its situation.

The sources of the Rhine and the Rhone, two of the grandest rivers in Europe, are to be found in the mountains of Swisserland. The lakes of Constance and Geneva have long been celebrated for their beauty.

The Alps, which divide Swisserland from Italy; the mountains of St. Gothard, in the canton of Uri; and Mont Blanc, on the borders of Savoy, are the highest mountains in Europe.

ITALY.

ITALY, the garden of Europe, the parent of the arts and of civilization, and once the mistress of the world, is still a fine, populous, and interesting country; but inhabited by a race of people who are degenerated by superstition and political slavery.

It is subdivided into the Kingdom of Italy which includes the Venetian States, the Kingdom of Etruria, the Roman States, and the Kingdom of Naples.

The Appenines form a grand chain of mountains, which runs through almost the whole extent of Italy.

Mount Vesuvius, near Naples, is a celebrated volcanic mountain. But Vesuvius, compared with Etna, in Sicily, is only a small hill; the circuit of Vesuvius is but thirty miles, that of Etna, is one hundred and eighty. The ashes of Vesuvius are sometimes thrown seven miles distant, but those of Etna are frequently cast thirty.

Rome is the principal city of the Pope's dominions, the present capital of Italy, and once the capital of the civilized world. Its population was formerly very great, but does not now exceed one hundred thousand.

Florence is the capital of Etruria, and is now regarded as the Athens of modern Italy. Milan is the capital of the Kingdom of Italy.

Sicily, the largest of the Italian islands, is separated from the south-west part of Naples by the Strait of Messina. This strait was famous for the Scylla and Charybdis of the ancients; the former being a rock, the latter a whirlpool. The chief towns are, Palermo, Messina, and Syracuse.

Sardinia, another large but very poor island, is situated almost in the centre of the Méditerranæan: the principal town is Cagliari.

Corsica is separated from the northern parts of Sardinia by the Strait of Bonafacio: its chief town is Bastia.

The island of Malta lies about sixty miles south of the islands and Sicily, and is celebrated for the strength of its fortifications, which are now in the possession of Great Britain.

Candia, to the south of Greece, is famous for Mount Ida. Both Malta and Candia are renowned for withstanding sieges by the Turks, who in the former lost 30,000 men, and in the latter 180,000 were destroyed.

Rhodes, north-east of Candia, was once famous for its colossal statue, between the legs of which ships sailed into the harbour. In its right hand was a light-house for the direction of mariners. It was destroyed several ages ago by an earthquake.

The principal rivers are, the Po, the Tiber, the Var, and the Adige.

SPAIN.

SPAIN is remarkable for its immense and valuable possessions in South America, and for the national inactivity and poverty which those possessions have created. From having been one of the first powers in Europe, it has not lately ranked above those of the second order.

Spain is divided into fourteen districts, or provinces, &c.

Austria	Catalonia
Biscay	Valencia
Navarre	New Castile
Galicia	Estramadura
Leon	Andalusia
Old Castile	Murcia
Aragon	Grenada. •

Its chief towns are, Madrid, the capital, Barcelona, Seville, Corrunna, and Cadiz, sometimes called Cales.

The principal rivers are the Ebro, the Tagus, and the Douro, all of which have their rise in Spain.

On a promontory, in the south of Spain, stands Gibraltar; which has been in the possession of the English for a century, and is so defended by nature and art as to be considered impregnable.

• The chief islands lying near Spain are, Majorca, Minorca, and Ilica.

PORTUGAL.

PORTUGAL, like Spain, has been enervated by her foreign possessions, and is now one of the most abject powers in Europe. The people are debased by indolence and superstition.

It lies between Spain and the Atlantic Ocean, and is the most westerly kingdom in Europe. It is divided into several provinces; as Estramadura, Entre Minho, Douro, Alentejo, &c. •

The chief towns are, Lisbon, the capital, and Oporto, famous for its exports of wine. Lisbon was destroyed by an earthquake in 1755, but has since been rebuilt in an elegant manner. The Azores belong to Portugal: they are situate at an equal distance from that country and Newfoundland.

GREAT BRITAIN.

GREAT BRITAIN is divided into England, Wales, and Scotland. It is six hundred miles long, and three hundred broad; and contains about twelve millions of inhabitants.

Great Britain is the undisputed mistress of the seas, which are every where covered with her ships. Her wealth, the value of her manufactures, and the extent of her commerce, are unequalled. The industry and intelligence of her inhabitants, the excellent form of her political constitution, the just administration of her laws, and the independence arising from her insular situation, combine to render her an object of pride to her own inhabitants, and of admiration to all other nations.

ENGLAND.

ENGLAND, the southern part of the island and kingdom of Great Britain, is bounded on the north by Scotland, on the north-east and east by the German Ocean, on the south by the English Channel, and on the west by St. George's Channel, the principality of Wales, and the Irish Sea. It is of a triangular form: and from the South Foreland in Kent, which may be termed the east point of the triangle, to Berwick upon Tweed, which is the north, its length is 345 miles; from that point to the Land's End, in Cornwall, which is the west, it is 425; and the breadth thence to the South Foreland 340. It lies between $1\frac{1}{2}$ degree east, and $5\frac{1}{2}$ west longitude, and between $49\frac{1}{2}$ and 56 degrees north latitude. The face of the country affords all that beautiful variety which can be found in the most extensive tracts of the globe; not, however, without romantic, and even dreary scenes, lofty mountains, craggy rocks, black barren moors, and wide uncultivated heaths; and yet few countries have a smaller proportion of land absolutely sterile and incapable of culture. The richest parts are, in general, the midland and southern. Towards the north it partakes of the barrenness of its neighbour Scotland: the east coast is, in many parts, sandy and marshy. A range of rude and elevated land, sometimes rising into lofty mountains, extends from the borders of Scotland to the very heart of England, running from north to south, and forming a natural division between the east and west sides of the kingdom. Cornwall is also a rough hilly tract; and a similar character prevails in part of the adjacent counties. These mountainous tracts abound with various mineral treasures.

The rivers are numerous; and the most considerable of them are, the Thames, Severn, Humber, Medway, Trent, Ouse, Tyne, Tees, Eden, Avon, Derwent, Dee, and Mersey

The lakes are neither numerous nor extensive, and are chiefly in the north-west counties; those of Westmoreland and Cumberland, in particular, exhibit such varieties of beautiful scenery, as to have become for some years past the fashionable object of summer excursions from every part of the country.

With respect to climate, England is situate in the north part of the temperate zone, so that it enjoys but a moderate share of the genial influence of the sun. Its atmosphere is inclined to chilliness and moisture, subject to frequent and sudden changes, and is more favourable to the growth than to the ripening of the products of the earth. No country is clothed with so beautiful and lasting a verdure: but the harvests, especially in the northern parts, frequently suffer from the unseasonable rains. The rigours of winter, however, and the heats of summer, are felt here in a much less degree than in parallel climates on the continent; a circumstance common to all islands: while the sea-ports in Holland and Germany are every winter locked up with ice, those of England, and even of Scotland, are never known to suffer this inconvenience. The whole country, some particular spots excepted, is sufficiently healthy; and the natural longevity of its inhabitants is equal to that of almost any region.

All the most valuable productions of England, both animal and vegetable, have been imported from foreign countries, and have been kept up and improved by constant attention. Originally this great island seems to have been almost entirely overrun with wood, and peopled only by the inhabitants of the forest. Here formerly roamed the bear, the wolf, and the wild-boar, now totally extirpated: large herds of stags ranged through the woods, roebucks bounded over the hills, and wild bulls grazed in the marshy pastures. By degrees the woods were destroyed, in order to make way for cultivation; the marshes were drained; and the wild animals, invaded in their retreats, gradually disappeared, and their places were supplied by the domestic kinds. England has now no other wild quadrupeds than some of the smaller kinds; as the fox, wild cat, badger, marten, and others of the weasel kind; the otter, hedgehog, hare, rabbit, squirrel, dormouse, mole, and several species of the rat and mouse. On the other hand, every kind of domestic animal, imported from abroad, has been reared to the greatest degree of perfection. The horse has been trained up for all the various purposes of strength and

swiftness ; so as to excel in those qualities the same animal in every other country. The horned cattle have been brought to the largest size and greatness justness of shape. The different races of sheep in England are variously distinguished, either for uncommon size, goodness of flesh, and plenty or fineness of wool. The deer of its parks, which are originally a foreign breed, are superior in beauty of skin, and delicacy of flesh, to those of most countries. Even the several kinds of dogs have been trained to degrees of courage, strength, and sagacity, rarely to be met with elsewhere. The improvement in the vegetable products of this island is not less striking than the animal. Nuts, acorns, crabs, and a few wild berries, were almost all the variety of vegetable food which its woods could boast : to other countries, and to the efforts of culture, it is indebted for corn, esculent roots and plants, and all its garden fruit. The rivers and seas of England are stocked with a great variety of fish, which yield a plentiful article of provision to all ranks of people. The manufacturers and commerce of this country are vast, extensive, and various ; in the woollen, cotton, and hardware manufactures in particular, it has long maintained a pre-eminence ; and, though nature has denied it the rich fruits of other countries, yet the manufacture, if it may be so called, of home-made wines, in imitation of all the varieties of the foreign, has been brought to an uncommon degree of perfection.

The government of England is a limited monarchy ; the legislative power residing in the king, lords, and commons ; and the executive in the king, the great officers of state, the judges, and all the inferior gradations of magistracy. The civil division of the country is divided into circuits, and shires, or counties ; these last are subdivided into hundreds and parishes. There are assizes and sessions held in the different counties, for the more easy distribution of justice ; the assizes are courts kept twice a year. Twelve judges are commissioned by the king for this purpose, and this they call going the circuit. At these assizes all civil and criminal causes may be determined. The jury are chosen by the sheriff of the county, and they are only directed in points of law by the judges. The established religion is episcopacy, but all other religions are tolerated. The ecclesiastical government of England is divided into two archbishoprics, called the provinces of Canterbury and York. That of Canterbury contains the dioceses of London, Winchester, Bath and Wells, Bristol,

Chichester, Ely, Exeter, Gloucester, Hereford, Litchfield and Coventry, Lincoln, Norwich, Oxford, Peterborough, Rochester, Salisbury, and Worcester; besides the four Welsh bishoprics of St. David, Bangor, Llandaff, and St. Asaph. The province of York contains the dioceses of Durham, Chester, and Carlisle, and that of Sodor and Man. Every prelate of the sees enumerated, that of Sodor and Man excepted, has a seat in the House of Lords.

England contains forty counties or shires; situate in the following order, taken from north to south:

<i>Counties.</i>	<i>Chief Towns.</i>
Northumberland - - - - -	Newcastle
Durham - - - - -	Durham
Cumberland - - - - -	Carlisle
Westmorland - - - - -	Appleby
Yorkshire - - - - -	York
Lancashire - - - - -	Lancaster
Cheshire - - - - -	Chester
Shropshire - - - - -	Shrewsbury
Derbyshire - - - - -	Derby
Nottinghamshire - - - - -	Nottingham
Lincolnshire - - - - -	Lincoln
Rutland - - - - -	Oakham
Leicestershire - - - - -	Leicester
Staffordshire - - - - -	Stafford
Warwickshire - - - - -	Warwick
Worcestershire - - - - -	Worcester
Herefordshire - - - - -	Hereford
Monmouthshire - - - - -	Monmouth
Gloucestershire - - - - -	Gloucester
Oxfordshire - - - - -	Oxford
Northamptonshire - - - - -	Northampton
Buckinghamshire - - - - -	Aylesbury
Bedfordshire - - - - -	Bedford
Huntingdonshire - - - - -	Huntingdon
Cambridgeshire - - - - -	Cambridge
Norfolk - - - - -	Norwich
Suffolk - - - - -	Bury St. Edmunds
Essex - - - - -	Chelmsford
Hertfordshire - - - - -	Hertford
Middlesex - - - - -	London
Kent - - - - -	Canterbury
Surry - - - - -	Guildford
Sussex - - - - -	Chichester

the English, Irish, and Scotch gates. It has a castle on the west side of the town ; and the cathedral is a stately structure ; it has also a very considerable manufacture of printed linens and checks, and is noted for the making of whips and fish-hooks. Carlisle was taken by the rebels in 1745, but retaken by the Duke of Cumberland. It is governed by a mayor, sends two members to parliament, and is 60 miles south of Edinburgh.

Cumberland sends six members to parliament. The chief towns are, Penrith, Brampton, Cockermouth, Whitehaven, Egremont, Ravenglass, and Ireby.

WESTMORELAND is 40 miles long, and 24 broad. It is generally divided into the baronies of Kendal and Westmoreland : the former is very mountainous, but the latter is a large champaign country. These are the only principal divisions of this county, of which the Earl of Thanet is hereditary sheriff. It lies partly in the diocese of Chester, and partly in that of Carlisle ; contains eight market towns, and twenty-six parishes ; and sends only four members to parliament. The air is clear, sharp, and salubrious, the natives generally living to an old age. The soil is various, that on the mountains being very barren, while that in the valleys is fertile, producing good corn and grass, especially in the meadows near the rivers. In the hilly parts, on the west borders, some mines of copper are worked, but most of the ore lies so deep that it will not answer the expense. This county yields the finest slate ; and abundance of hams are cured here. The principal rivers are, the Eden, Lune, and Ken. It has also several fine lakes, the principal of which is Winnander-mere, or Windermere-water. In the forest of Martindale, to the south of Uls-water, the breed of red deer still exists in a wild state. The principal towns are, Appleby, Kendal, Kirkby-Lonsdale, and Kirkby Stephen. Appleby is the county town.

YORKSHIRE, the largest county in England, extends 90 miles from north to south, and 115 from east to west. It is divided into three ridings, called the North, East, and West ; and subdivided into 26 wapentakes, which contain one city, 58 market towns, and 563 parishes. It lies in the diocese of York (except Richmondshire, which belongs to the diocese of Chester) and sends 30 members to parliament. The air and soil of this extensive county vary extremely. The east riding is less healthy than the others ;

but this inconvenience decreases in proportion as the county recedes from the sea. On the hilly parts of this riding, especially in what is called the York Wolds, the soil is generally barren, dry, and sandy; but great numbers of lean sheep are sold hence, and sent into other parts to be fattened. The west riding enjoys a sharp but healthy air, and the land on the western side is hilly, stony, and not very fruitful; but the intermediate valleys consist of much good arable ground, and pasture for the largest cattle. It also produces iron, coal, jet, alum, horses, and goats. Here the clothing manufactures principally flourish. The north riding, in general, exceeds the other two in the salubrity of the air. The worst parts breed lean cattle; but on the sides of the hills, in the valleys, and plains, it produces good corn, and rich pastures for large cattle. Richmondshire, on the north-west of this riding, was formerly a county of itself; here many lead mines are worked to great advantage. In Yorkshire, likewise, are the districts of Cleveland, Holderness, and Craven. In this last district are two of the highest hills in England; the one named Wanside, the other Ingleborough. The principal rivers are, the Ouse, Don, Derwent, Calder, Aire, Wharfe, Nidd, Ure, and Hull, all which terminate in the Humber, which falls into the German Ocean between Yorkshire and Lincolnshire. The chief towns in this county are, the city of York, Leeds, Wakefield, Halifax, Sheffield, Rippon, Pontefract, or Pomefret, Doncaster, and Aldborough, in the west riding. Richmond, Scarborough, Boroughbridge, Northallerton, Gisborough, Malton, Whitby, Knaresborough, and Thirsk, in the north riding. Kingston-upon-Hull, or Hull, Beverley, Hedon, Patrington, and Burlington or Bridlington, in the east riding.

York is the capital, with an archbishop's see. It is the Eboracum of the Romans, and many of their coffins, urns, coins, &c. have been found here. It has always been considered as the capital of the north, and, in point of rank, as the second city in the kingdom; and, although it is now surpassed in wealth and population by many of the more modern trading towns, it still supports a considerable degree of consequence, and is the residence of many genteel families. The Cathedral of St. Peter, generally called the Minster, is reckoned the most elegant and magnificent Gothic structure in the kingdom, Lincoln perhaps excepted. Besides this cathedral, York contains but seventeen churches in use; though in the reign of Henry V. there were forty

four parish churches, seventeen chapels, and nine religious houses. It is divided by the Ouse into two parts, which are united by a stone bridge of five arches, the centre one eighty-one feet wide; and the river is navigable to this city for vessels of seventy tons burden, although it is forty miles from the sea. York is surrounded by a wall, which is now very much decayed, through which are entrances by four gates and five posterns; the former of which stand equal to the four cardinal points. It has a castle, built by William the Conqueror, which was formerly a place of great strength, but is now a county prison for debtors and felons. Without the north gate stood the magnificent Abbey of St. Mary, some ruins of which remain, and on the site of part of it is the manor or royal palace, built by Henry VIII. where several of our kings have lodged, though it is now neglected. York is governed by a lord mayor, recorder, twelve aldermen, and other officers. The guildhall, built in 1446, is a grand structure, supported by two rows of oak pillars, each pillar single. The corporation built a Mansion-house, in 1728, for the lord mayor; and among the modern buildings are, a noble Assembly-house, designed by the Earl of Burlington, a Theatre royal, and an elegant Court-house, on the right of the castle: here is also a very large and commodious Asylum for Lunatics. York is seventy miles south by east of Durham, and eighty-nine east of Lancaster.

LANCASHIRE is a maritime county, and in the diocese of Chester. It is 74 miles from north to south (including a detached hundred on the north-west, called Furness, which is separated from the rest by a creek, at the head of Morecambe Bay) and its greatest breadth is 42 miles. It is divided into six hundreds, containing 23 market towns, and 66 parishes; and sends 14 members to parliament. It is a county palatine, under the title of the Duchy of Lancaster; the only duchy of England (that of Cornwall excepted) which is not merely titular. The air, in general, is very healthful. This county comprises a variety of soil and face of country; but, upon the whole, is one of those which are the least favoured by nature. Among its products is a species of coal, called Cannel, far exceeding all other, not only in making a clear fire, but for being capable of being manufactured into candlesticks, cups, standishes, snuff-boxes, &c. and of being polished so as to represent a beautiful black marble. The principle manufactures are, linen, silk, and cotton goods; fustians, counterpanes, shalloons, baize, serges,

tapes, small ware, hats, sail-cloth, sacking, puns, non goods, cast plate-glass, &c. Of the commerce of this county, it may suffice to observe, that Liverpool is the second port of the kingdom. The principal rivers are, the Mersey, Irwell, Ribble, Lon, Levern, Wyre, Hodder, Roche, Duddon, Winster, Ken, and Calder; and it has two considerable lakes, Winander-mere, and Coniston-mere, the former of which is noted for an excellent fish, called the Char, which is not found any where else in England, but in the Ulders-water in Cumberland. The chief towns are, Lancaster, the county town, Liverpool, Manchester, Preston, Wigan, Clitheroe, Warrington, Blackburn, and Newton.

The town of Lancaster is seated on the river Lon, or Lun, which here forms a port for vessels of moderate burden, and over which is a stone bridge of five arches. It has but one church, on the side of a hill, on the summit of which is the castle (formerly John of Gaunt's) serving both as the shire-house and the county jail. It is 68 miles south of Carlisle.

CHEESHIRE is a maritime county; it is about 50 miles in length, 33 in breadth, and 112 in circumference. The north-west corner shoots out into the Irish Sea, forming a peninsula, called Wirral, about sixteen miles long, and seven broad. This county is in the province of York, and diocese of Chester, contains seven hundreds, twenty-six parishes, a city, and twelve market towns. The air is generally esteemed healthy, it being more serene than that of Lancashire; and the soil is for the most part good. That part which is low and level was named by Edward I. *The Vale Royal of England*, on account of its great fruitfulness in corn, and the extraordinary richness of its pastures. This county has quarries in which mill-stones are dug, nearly equal to those brought from France. Very large quantities of fine cheese are made here, which is esteemed the best in England, insomuch that it is computed the inhabitants export to London, yearly, 14,000 tons; to Bristol and York, down the Severn and Trent, 8000 tons more; besides great quantities shipped at Chester and Liverpool for Ireland and Scotland. The commodities, besides the cheese already mentioned, are, salt, corn, cattle, sheep, fish, particularly salmon (which is very fine) fowls, and other articles of provision. The market towns are, Nantwich, Middlewich, Northwich, Macclesfield, Congleton, Malpas, Frodsham, Knutsford, Altringham, Halton, Sandbach, and

Stockport. It sends four members to parliament, two for the county, and two for the city of Chester. The principal rivers are, the Mersey, Weaver, Dee, and Dane; and it has several lakes.

SHROPSHIRE is 48 miles long and 28 broad; it contains 14 hundreds, 13 market towns, and 170 parishes; and sends 12 members to parliament. The air is salubrious, and not very sharp, except on the hills: the soil is generally fruitful, especially on the north and east parts, which produce plenty of wheat and barley; but the south and west being mountainous, are less fertile, yet yield sufficient pasture for sheep and cattle. This county abounds with lead, copper, iron, limestone, freestone, pipe-clay, bitumen, and coal. The principal rivers are, the Severn and the Teme. The principal towns are, Shrewsbury, Ludlow, Bridgenorth, Wenlock, Bishop's Castle, Whitchurch, Wem, and Newport.

Shrewsbury, the capital, is seated on a peninsula formed by the Severn, over which are two bridges, and is surrounded by a wall with three gates; it contains five churches, and is governed by a mayor, a recorder, twelve aldermen, twenty-four common council, and a town-clerk. It is the chief mart for a coarse kind of woollen cloth, made in Montgomeryshire, called *Welsh webs*, and for all sorts of Welsh commodities, which are generally bought in a rough state at Welshpool, and finished here. In 1283 Edward I. held a parliament here, when the lords sat in the castle, and the commons in a barn. Another parliament was held here in 1397, by Richard II. Near this town, in 1403, was fought the battle between Henry IV. and Henry Percy, nicknamed *Hotspur*, in which the latter was defeated and slain. Shrewsbury is 18 miles east of Welshpool, and 36 west of Litchfield.

DERBYSHIRE extends 54 miles from north to south, and 38 from east to west, where broadest, but in the south part it is not above six. It is 164 miles in circumference. It lies in the diocese of Litchfield and Coventry, sends four members to parliament, and contains nine hundreds, nine market towns, and 106 parishes. The air, especially on the east side, is wholesome and agreeable; but in the Peak, toward the north, it is sharp and cold. The hills in the northern part, by attracting the passing clouds, cause the rain to descend there in greater abundance than in the circumjacent counties. The south and east parts are pleasant

and fertile, producing most kinds of grain, particularly barley; even the north-west part, called the Peak, is abundantly rich; for the bleak mountains abound in the best lead, with marble, alabaster, mill-stones, iron, coal, and a coarse sort of crystal; and the intermediate valleys are fruitful in grass. The barytes, or ponderous earth, which seems to be the medium substance between earth and ores, is found in great quantities. The principal rivers are, the Derwent, Dove, Erwash, Trent, and Crawl. The principal towns are, Derby, Chesterfield, Wirksworth, Ashburn, Bakewell, and Buxton.

Derby is the county town, and situate on the river Derwent, over which is a handsome stone bridge. It has five churches, the chief of which (named All Saints) is noted for its beautiful tower. In 1734 a machine was effected here by Sir Thomas Lombe, for the manufacturing of silk, the model of which was brought from Italy. It was the first of its kind erected in England; and its operations are, to wind, double, and twist the silk, so as to render it fit for weaving. Here are also manufactures of silk, cotton, and fine worsted stockings; and a fabric of porcelain, equal, if not superior in quality, to any in the kingdom. Derby sends two members to parliament, and is governed by a mayor, eleven aldermen, and other officers.

•
NOTTINGHAMSHIRE is in the diocese of York; it is 38 miles long and 20 broad. It contains eight hundreds, eight market towns, and 168 parishes; and sends eight members to parliament. It enjoys such a temperature of soil and climate, as to render it one of the most fertile and pleasant counties in England. The principal rivers are the Trent and Idle. The manufacturers chiefly consist of frame-work knitting, glass, and earthenware. The chief towns are, Nottingham, Newark, East Retford, Southwell, and Mansfield.

Nottingham, the county town is situate on a rocky eminence crowned by its castle, a magnificent modern structure, belonging to the Duke of Newcastle, and built on the site of an ancient fortress, celebrated in English history; it is a populous and handsome town, and distinguished by its spacious market place: it is one of the principal seats of the stocking manufacture, particularly of the finer kinds, as those of silk and cotton; and has also a manufacture of coarse earthenware; it has three parish churches, and several meeting houses for dissenters; and it is remarkable

for its vaults, or cellars cut into the rock. At this town Charles I. set up his standard, at the commencement of the civil war, which terminated in his destruction. Nottingham is governed by a mayor, recorder, six aldermen, two sheriffs, eighteen common council, two chamberlains, and two coroners.

LINCOLNSHIRE is a maritime county; it is 55 miles long and 36 broad. It is divided into three parts, namely, *Holland on the south-east, Kesteven on the south-west, and Lindsey on the north.* It contains 30 hundreds, one city, 24 market-towns, and 630 parishes; and sends 12 members to parliament. Its principal rivers are, the Humber, Trent, Witham, and Welland. The air is various, according to its three divisions. The soil in many places is very rich, the inland part producing corn in great plenty.

Lincoln is the capital, and is a bishop's see, the largest diocese in England. It is seated on the side of a steep hill, on the river Witham, which here divides into three streams. It had formerly 50 churches, now reduced to 13, besides the cathedral. The cathedral is admired for its interior architecture, which is in the richest and lightest Gothic style; and its great bell, called Tom of Lincoln, requires twelve men to ring it. Lincoln is governed by a mayor, and is 32 miles north-east of Nottingham.

RUTLANDSHIRE is the smallest county in England, being only 15 miles long and 11 broad. It is supposed to have received its name from the red colour of the soil, which in some parts is a sort of ruddle. It lies in the diocese of Peterborough; contains 48 parishes and two market towns; and sends two members to parliament. The air is very good, and the soil rich. The principal rivers are, the Welland, and the Guash or Wash. Oakham is the county town. The other market town is Uppingham.

LEICESTERSHIRE is in the diocese of Lincoln; it extends 35 miles from east to west, and 30 from north to south; contains six hundreds, 12 market towns, and 193 parishes, and sends four members to parliament. The air is extremely healthful. Its chief rivers are, the Avon, Soar, Wreke, Anker, and Welland. The soil in general affords great quantities of rich grazing land, and is peculiarly fitted for the culture of beans, for which it is proverbially noted. It has also valuable coal mines. This county is famous for

its large black horses, and horned cattle, as well as for its sheep, which are of a very large size, without horns, and clothed with thick long flakes of soft wool. The manufacture of stockings is the principal one in the county. Malton-Mowbray, Loughborough, Lutterworth, Ashby-de-la-Zouch, and Market Bosworth, are the chief towns, besides Leicester, which is the county town, and sends two members to parliament, and is governed by a mayor. It is seated on the river Soar, one of the bridges over which, called Bow Bridge, was long visited by the lovers of antiquity, on account of its having been the accidental monument over the grave of Richard III. but this bridge fell in the year 1791. Leicester is 24 miles south-east of Derby

STAFFORDSHIRE is 44 miles long and 27 broad. It lies in the diocese of Litchfield and Coventry; contains five hundreds, one city, 16 market towns, and 130 parishes; and sends ten members to parliament. The principal rivers are, the Trent, Dove, Sow, Churnet, Stour, Peak, and Manyfold. The air is mild and wholesome: the soil in the south part is good and rich, though not without heaths, which take up a large tract of ground; it abounds in coal and iron. There are also good stone quarries, plenty of alabaster and limestone. This county is famous for its potteries, and for its canal (Grand Trunk, or Staffordshire canal) a work begun in 1766, under the direction of a Mr. Brindley, in order to form a communication between the Mersey and the Trent, and, of course, between the Irish Sea and the German Ocean. Its length is 92 miles; namely, 31 miles on the north side, from Harecastle Hill, where it was begun, to the Duke of Bridgewater's canal at Preston on the Hill, in Cheshire, and 61 miles from the south side of the hill to Wildon Ferry, in Derbyshire, where it communicates with the Trent. To effect this work, 40 locks were constructed on the south side, there being 316 feet fall. On the north side there is only one lock, which is near Middlewich, and is 14 feet wide. The canal is 29 feet broad at the top, 26 at the bottom, and the depth four feet and a half. It is carried over the river Dove, in an aqueduct of 23 arches, and the ground is raised above a mile to a considerable height: it is also carried over the Trent in an aqueduct of six arches. At Harecastle Hill it is conveyed under ground 2880 yards; at Barton, in Cheshire, a subterraneous passage is effected of 560 yards in extent; and, in the same neighbourhood, another of 350; at Preston on the Hill,

where it joins the Duke's canal, it passes under ground 1241 yards. From the neighbourhood of Stafford, a branch is made from this canal, to run over Wolverhampton, and to join the Severn near Bewdley ; from this again two other branches are carried, one to Birmingham, the other to Worcester. My Brindley died in 1772, and left this canal to be finished by his brother-in-law, Mr. Henshall, who completed it in 1777, since which time branches of this canal have been carried to almost every place of note within 100 miles. Stafford is the county town ; besides which the chief towns are, the city of Litchfield, Newcastle-under-Lyne, Tamworth, Wolverhampton and Bourton-upon-Trent.

WARWICKSHIRE is 47 miles long and 27 broad. It lies partly in the dioceses of Litchfield and Coventry, and partly in that of Worcester ; contains four hundreds, and one liberty, one city, 17 market towns, and 158 parishes ; and sends six members to parliament. The air is very mild, pleasant, and healthy. The north part, called the Woodlands, is divided from the south, called the Feldon, by the river Avon ; and the soil of both is rich and fertile. It produces corn, malt, wool, wood, cheese, coal, iron, and limestone. The principal rivers are, the Avon, Tame, and Arrow. The chief towns are, Warwick, the city of Coventry, Birmingham, Stratford-on-Avon, Southam, Coleshill, and Nuneaton.

Warwick is the county town, situate on a rocky eminence, above the river Avon, over which is a strong bridge. It was fortified with a wall, now in ruins ; but it has still a fine castle of the ancient Earls of Warwick, inhabited by the present possessor of that title. It had anciently six monasteries and six churches ; of the latter two only remain : it has likewise a handsome shire-house, a good free-school, and a noted hospital, called St. James's, for twelve reduced gentlemen, who have each £20. a year, and the chaplain £50. It is 15 miles south-west of Coventry.

WORCESTERSHIRE is 35 miles long and 27 broad ; it contains seven hundreds, one city, 11 market towns, and 152 parishes ; and sends nine members to parliament. The air is very healthy, and the soil in the vales and meadows very rich, producing corn and pasture, particularly the vale of Evesham, which is styled the granary of these parts. The hills have generally an easy ascent, except the Malvern Hills, in the south-west part of the county, and feed large flocks of sheep. The other hills are the Licky, near

Bromsgrove, toward the north; and the Bredon Hills, toward the south-east. This county had formerly two large forests, but the iron and salt works have in a manner destroyed them; and these works are now chiefly carried on with coal. Here is plenty of fruits of most sorts, especially pears, which are in many places found growing in the hedges. The chief commodities are, coal, corn, hops, cloth, cheese, cider, perry, and salt. The principal rivers are, the Severn, Teme or Tend, and Avon. The city of Worcester, Evesham, Droytwich, Bewdley, Stourbridge, and Kidderminster, are the chief towns.

Worcester is the capital, and a bishop's see. It contains nine churches, besides the cathedral, and St. Michael's, without the liberties of the city; and has also three grammar schools, seven hospitals, and a well contrived quay. It is governed by a mayor, aldermen, and a number of other officers; and carries on a considerable trade in woollen stuffs and gloves, and has likewise a manufacture of elegant china ware. Here Cromwell, in 1651, obtained a victory over the Scotch army, which had marched into England to re-instate Charles II. who after his defeat escaped with great difficulty into France. Worcester is seated on a gentle ascent, on the Severn, and 56 miles north north-east of Bristol.

•

HEREFORDSHIRE is 40 miles long and 27 broad. It contains 11 hundreds, one city, 13 market towns, and 176 parishes; and sends eight members to parliament. The air is very good, and the soil fruitful, especially in the vales. Apples grow in greater abundance here than in any other county, being plentiful even in the hedge-rows. The sheep of Herefordshire are small, affording a fine silky wool, in quality approaching to the Spanish. It is noted for wool and cider, which last is transported all over England. The principal rivers are, the Wye, Mynnow, and Lug. Hereford is the capital, and is a bishop's see.

MONMOUTHSHIRE is 33 miles long, and 22 broad. It lies in the diocese of Llandaff; contains six hundreds, seven market towns, and 127 parishes; and sends three members to parliament. The air is temperate and healthy, and the soil fruitful, though mountainous, and woody. The principal rivers are, the Rimney, the Ebwith, the Usk, and the great river Wye. It was formerly reckoned one of the counties of Wales; and from the names of its towns and

villages, its mountainous rugged surface, and its situation beyond the Wye, which seems to form a natural boundary between England and Wales in this part, it certainly partakes mostly of the character of the latter country, though now comprehended in the civil division of the former. The higher ranks generally speak English, but the common people use the Welsh language. The manufacture of this county is flannels. Abergavenny, Chepstow, Caerleon, Newport, and Pontipool, are the chief towns, besides Monmouth, which is the county town, and is seated at the confluence of the rivers Wye, and Mynnow. It contains two parish churches, one of which (Monk's Church) is a very curious structure. Here was born Henry V. who was called Henry of Monmouth. It sends one member to parliament, and is 21 miles west of Gloucester.

GLOUCESTERSHIRE is 65 miles in length and 32 in breadth; it contains 13 hundreds, one city, 20 market towns, and 218 parishes; and sends eight members to parliament. Its air is generally good, and the soil is extremely fruitful. The staple commodities of the county are its woollen cloth and cheese. Its principal rivers are, the Severn, the Warwickshire Avon, the Lower Avon, the Wye, Thames, Coln, and Lech. The chief market towns are, Tewkesbury, Cirencester, Cheltenham, Campden, and Stow.

Gloucester is the capital, and is seated on the east side of the river Severn, where, by two streams, it makes the Isle of Alney. It is large and well inhabited: it once contained eleven churches, but now has only five, besides the cathedral of St. Peter, which is a handsome structure, and remarkable for its large cloister, and whispering gallery, the tombs of Robert, Duke of Normandy, eldest son of William the Conqueror, and the unfortunate Edward II. It has five hospitals, two free-schools, and a county jail; and was fortified with a wall, which Charles II. after the restoration, ordered to be destroyed. It is governed by a mayor, who is also the recorder, twelve aldermen, a number of common council, &c. Great quantities of pins are made here; and here are twelve incorporated trading companies.

OXFORDSHIRE, in its extreme length, is 48 miles, and its greatest breadth 26; it contains 14 hundreds, one city, 12 market towns, and 218 parishes; and sends ten members to parliament; two for the city, two for the university, two for the county, and two for its boroughs. The air is

sweet, mild, pleasant, and healthy; for which reason it contains several gentlemen's seats; and the soil, though various, is fertile in corn and grass; and the hills yield ochre, pipe-clay, and other earths, useful for various purposes. Besides Oxford, the principal towns are, Banbury, Burford, Witney, Woodstock, Henley, and Thame.

Oxford is the capital. It is a bishop's see, and an university; and, beside the cathedral, has 13 parish churches. It is seated at the confluence of the rivers Isis and Cherwell, and, with the suburbs, is of a circular form, three miles in circumference. The university is said to have been founded by the great Alfred, but is generally supposed to have been a seminary of learning before his time, although it owed its revival and consequence to his liberal patronage, receiving from him grants of many privileges, and large revenues. Here are 20 colleges and five halls, several of which stand in the streets, and give the city an air of magnificence. The colleges are provided with sufficient revenues for the maintenance of a master, fellows, and students. In the halls the students live, either wholly or in part, at their own expense. The colleges are, University, Baliol, Merton, Exeter, Oriel, Queen's, New College, Lincoln, All Souls', Magdalen, Brazen-nose, Corpus Christi, Christ Church, Trinity, St. John's, Jesus College, Wadham, Pembroke, Worcester, and Hertford. Of these the most ancient is University College, founded before the year 872; and to Christ Church College, begun by Cardinal Wolsey, and finished by Henry VIII. belongs the cathedral. The halls are, Alban, Edmund, St. Mary, New Inn, and St. Mary Magdalen. Among the libraries in the university, the most distinguished are the Bodleian, founded by Sir Thomas Bodley; Radcliffe, founded by Dr. John Radcliffe; those of All Soul's College, Christ Church, Queen's, New College, St. John's, Exeter, and Corpus Christi. Among the other public buildings are, the Theatre, the Ashmolean Museum, the Clarendon Printing-office, the Radcliffe Infirmary, and an Observatory. At Oxford, King John, compelled by his barons, summoned a parliament to meet, in 1208; the proceedings of which were so disorderly, that it was known afterwards by the name of the mad parliament. Charles I. assembled a parliament here, 1625, in consequence of the plague then raging in London; and, in 1664, he summoned such of the members of both houses as were devoted to his interests; these were seceders from the parliament then sitting at Westminster. The city was distinguished for its

attachment to that unfortunate king, who here held his court during the whole civil war. It is governed by a mayor and aldermen; and is 20 miles south-west of Buckingham.

NORTHAMPTONSHIRE is in the diocese of Peterborough, about 40 miles long and 20 broad. It contains 20 hundreds, one city, 11 market towns, and 326 parishes, and sends nine members to parliament. The air is very healthy, except in the north-east part near Peterborough, which is the commencement of a fenny tract extending to the Lincolnshire Wash. The principal rivers are, the Nen and Welland; besides which, it is partly watered by the Ouse, Leam, Cherwell, and Avon. Peterborough, Daventry, Higham Ferrers, Brackley, and Oundle, are the principal towns, besides Northampton, the county town, which is seated on the river Nen.

Northampton is a handsome town, has a spacious market place, and had seven churches, which are now reduced to four. It was almost entirely destroyed by fire in 1675, but was soon rebuilt; it has a good free-school, and a county infirmary and jail. In the meadows below the town a battle was fought in 1460, between Henry VI. and the Yorkists, in which the former was defeated and made prisoner; and near it is a fine Gothic structure called Queen's Cross, erected by Edward I. in memory of his Queen Eleanor. This town is 30 miles south-east of Coventry.

BUCKINGHAMSHIRE is in length about 45 miles, in breadth about 18, and in circumference 138 miles. It is in the diocese of Lincoln, and contains eight hundreds, 185 parishes, and 15 market towns. Its principal rivers are, the Thames, Coln, Ouse, and Tame. The air is healthy, and the soil rich, being chiefly chalk or marl. The most general manufacture is thread-lace and paper; and the woods of the hills, chiefly beech, form a considerable article of profit, both as fuel and timber. The market towns are, Buckingham, Chipping Wycomb, Aylesbury, Agmondesham, Wendover, Great Marlow, Colnbrook, Eaton, Beaconsfield, &c. It sends 14 members to parliament.

BEDFORDSHIRE contains nine hundreds, ten market towns, and 116 parishes. The form of it is oval, 36 miles long, 18 broad, and about 100 in circumference. The air is serene and healthy. Its rivers are, the Ouse, Ivel, and Ousel. Its chief products are corn, butter, and fuller's

earth; its manufactures, thread-lace, straw-ware, and hats. The market towns are, Bedford, Potton, Biggleswade, Shefford, Ampthill, Harold, Woburn, Tuddington, Dunstable, Leighton-Buzzard, and Luton. It sends four members to parliament.

HUNTINGDONSHIRE, which is in the diocese of Lincoln, is 25 miles in length and 20 in its broadest parts. It contains four hundreds, six market towns, and 79 parishes. The principal rivers are, the Ouse, Nen, and the Cam, which last divides it from Cambridgeshire. Its chief commodities are, corn, malt, and cheese; and it fattens abundance of cattle. This county sends four members to parliament; and the sheriff, who is chosen alternately from Cambridge, the Isle of Ely, and Huntingdonshire, is sheriff of both counties. Huntingdon is the county town, 16 miles west by north of Cambridge.

CAMBRIDGESHIRE is about 47 miles in length from north to south, 18 in breadth from east to west, and 130 in circumference. It lies in the province of Canterbury, and diocese of Ely; and is divided into 17 hundreds, in which are contained one city, one borough, with a celebrated university, seven other market towns, and 163 parishes. The principal rivers are, the Grant, Ouse, Nen, and Cam. The air and soil vary extremely: some parts, especially the southern and eastern, are pleasant and healthy; but the northern part, called the Isle of Ely, is low and fenny, from the confluence of many rivers. All the waters of the middle part of England, which do not run into the Thames, or the Trent, fall into these fens; and in the latter part of the year, when they are overflowed by water, they appear covered with fogs; so that while the higher grounds of the adjacent country glitter with the beams of the sun, the Isle of Ely appears wrapt in a mist. The market towns of the county are, Royston, Newmarket (part of which is in Suffolk,) Linton, Caxton, Mersh or Marsh, Wisbeach, and Thorney. It sends six members to parliament.

Cambridge is the county town, and seat of a celebrated university, situate on the river Cam. It consists of fourteen parishes, and is governed by a mayor, who, on entering upon his office, takes an oath to maintain the privileges of the university. The town-hall and shire-house are the only buildings; hat do not belong to the university: the

county jail is the gatehouse of an ancient castle, built by William the Conqueror. In the market place, which consists of two spacious oblong squares united together, is a conduit that is constantly running. The university is supposed to have been founded during the Heptarchy. It contains 12 colleges and four halls, which have equal privileges with the colleges. The colleges are, Peter House, Corpus Christi or Bennet, Gonville and Caius, King's, Queen's Jesus', Christ's, St. John's, Magdalen, Trinity, Emmanuel, and Sidney Sussex. The halls are, Clare, Pembroke, Trinity, and Catherine. Of the colleges Peter house is the most ancient, being founded in 1257; and King's and Trinity colleges the most considerable. King's College is the noblest foundation in Europe, and the chapel one of the finest pieces of Gothic architecture in the world. The library, chapel, &c. of Trinity College, justly rank in the first place. The other structures belonging to the university are, the Senate House, a fine edifice, which, with St. Mary's Church, the Schools, the University Library, and other buildings, form a noble square. Here also is a Botanical Garden, and a general Hospital, called Addenbrooke's, from the name of the founder.

NORFOLK is a maritime county, and in the diocese of Norwich. It contains 31 hundreds, one city, 27 market towns, and 660 parishes; and sends 12 members to parliament. Its principal rivers are, the Ouse, Nen, Waveney, Yare, and Bure. The manufactures of Norfolk are, worsted, woollen, and silks. Norwich is the capital. The other chief towns are, Yarmouth, Lynn-Regis, Thetford, Harleston, Reepham, Holt, North Walsham, and Castle Rising. This county is 60 miles long, and 34 broad.

Norwich is surrounded by a wall, now much decayed, and seated on the river Yare, which runs through it, and is navigable to Yarmouth. It has 36 parish churches, besides the cathedral, some of which were formerly covered with thatch; two churches for the Flemings, some dissenting meeting-houses, and a Roman catholic chapel. It has a stately castle, on a hill which is the shire-house and the county jail. Here is also a city and a county hospital, a theatre royal, and a lofty market-house of freestone. The ancient Dukes of Norfolk had a palace here, which is still in existence as a workhouse. Here is also a free-school, founded by Edward VI. and several other charitable foun-

dations. Near this city are the ruins of the castle of Kett, the tanner, by whose rebellion, in the reign of Edward VI. the city was reduced to a ruinous state.

SUFFOLK is a maritime county, 50 miles long and 25 broad. It lies in the diocese of Norwich; contains 22 hundreds, 28 market towns, and 572 parishes; it sends 16 members to parliament. The air is clear and healthy; the soil is of various qualities, but the country in general level. The principal rivers are, the Stour, Waveney, Little Ouse, Lark, Deben, Gipping, and Orwell. Ipswich is the county town; besides which, the principal towns are, Bury St. Edmunds, Sudbury, Aldborough, Eye, Orford, Lowestoff, Beccles, Bungay, Dunwich, and part of Newmarket.

ESSEX is a maritime county, and in the diocese of London; 44 miles long and 42 broad. It contains 18 hundreds, 27 market towns, 415 parishes, and sends eight members to parliament; it also possesses a variety of soil and face of country. Its south-west part is occupied principally by the two forests of Epping and Hainault; and is noted for its butter, which is sold at a high price in London, under the name of Epping butter. The north-west part, from Saffron Walden to Cambridge, is famous for the growth of saffron, which is almost peculiar to this district, and is allowed to be the best in the world. The middle part is a fine corn country. The part bordering on the Thames and the sea consists chiefly of marshy grounds, which afford excellent pasturage, yet are deemed unwholesome and aguish. The principal rivers are, the Thames, Blackwater, Coln, Chelmer, Stour, Crouch, and Roding. Chelmsford is the county town, but Colchester is the largest and most famous, and is a place of great antiquity. It had 16 parish churches, but now only 12 are used. Most of them were damaged in Cromwell's time. It was lately a corporation, but lost its charter by some misdemeanour; however it still sends two members to parliament. The other principal towns are Harwich, Maldon, and Braintree.

HERTFORDSHIRE is about 31 miles long, and 28 broad. It contains eight hundreds, eight market towns, and 120 parishes; and sends six members to parliament. It abounds in corn, river fish, sheep, and fat cattle, and the air is good all over the county. The principal rivers are, the Lea.

Stort, Coln, Gade, Bean, and the Rib. Hertford is the county town.

MIDDLESEX is the least county in England, except Rutlandshire, being only 22 miles from east to west, and 17 from north to south; but it is by far the richest. It contains 126 parishes, beside London, and four market towns; and sends eight members to parliament, two for the county, two for the city of Westminster, and four for London: besides which the principal places are, Uxbridge, Brentford, Chelsea, Highgate, Hampstead, Kensington, Hackney, and Hampton Court. The air is healthy, but the soil, in general, being gravelly, is not naturally fertile; though by means of its vicinity to the metropolis, many parts of it are converted into rich beds of manure, clothed with almost perpetual verdure. There are still however, very extensive tracts of uncultivated heath. Beside the Thames, the Lea, and the Coln, which are its boundaries to the south, the south-east and the west, Middlesex is watered by several small streams; one of which, called the New River, is artificially brought from Amwell, in Herts, for the purpose of supplying London with water.

London is the capital, and the metropolis of the united kingdom; one of the largest and most opulent cities in the world, mentioned by Tacitus as a considerable commercial place in the reign of Nero. In its most extensive view, as the metropolis, it consists of the city properly so called, the city of Westminster, and the borough of Southwark, besides the suburbs in Middlesex and Surry, within what are called the bills of mortality. London and Westminster are in Middlesex, on the north side of the river Thames; and Southwark is on the opposite bank, in Surry. The extent of the whole, from Limehouse and Deptford to Milbank and Vauxhall, is above seven miles; but the greatest breadth does not exceed three. The city is divided into 26 wards, each governed by an alderman; and from the aldermen the lord mayor is annually chosen. There are likewise 236 common councilmen, a recorder, a common serjeant, two sheriffs (who are also sheriffs of Middlesex) chamberlain, a town-clerk, a city remembrancer, a water bailiff, and many inferior officers. Westminster, once a mile from London, but now united to it, is governed by a steward, who is generally a nobleman chosen by the king and chapter; and he has an under steward who offi-

ciates for him. Next to him is the high bailiff, chosen also by the dean and chapter, whose power resembles that of a sheriff. The suburbs are under the jurisdiction of the magistrates; and those of Middlesex, besides the county hall, on Clerkenwell Green, have an office in Bow-street, long distinguished for public spirit and activity, and seven other public offices. Southwark was long independent of London, but Edward III. granted it to the city. It was then called the village of Southwark; and afterwards named the bailiwick. In the reign of Edward VI. it was formed into a twenty-sixth ward, by the name of Bridge-ward without. On the death of the alderman of this ward, he is succeeded by the next in seniority, to whatever ward he may belong; this ward being considered as a sinecure, and consequently the most proper for "the father of the city." The city has likewise a high bailiff and steward here. Among the churches in the metropolis, the cathedral of St. Paul is the most conspicuous, and inferior to none in Europe, except St. Peter's at Rome. This noble fabric is now destined to be the receptacle of the monuments of such illustrious men as may do honour to their country by their talents and their virtues. The first erected monument was for that great philanthropist Mr. Howard, and the second for Doctor Samuel Johnson. That for Lord Nelson is also placed here. Westminster Abbey is a noble specimen of Gothic architecture. Here most of the English sovereigns have been crowned, and many of them interred. It contains also a great number of monuments of kings, statesmen, heroes, poets, and persons distinguished by genius, learning, and science. The chapel of Henry VII. adjoining, Leland calls the wonder of the world. St. Stephen's, in Walbrook, is a church of exquisite interior beauty, the masterpiece of Sir Christopher Wren. Bow Church, in Cheapside; St. Bride's in Fleet-street; St Dunstan's in the East; and St. Martin's in the Fields, are among the other churches most distinguished for fine architecture. The parish churches in the bills of mortality amount to 146; namely, 97 within the walls, 16 without the walls, 23 out-parishes in Middlesex and Surry, and 10 in the city and liberties of Westminster. Besides these churches, is one belonging to the Temple, a celebrated seat of law. It was founded by the Knights Templars in the reign of Henry II. upon the model of that of the Holy Sepulchre at Jerusalem. There are likewise a great number of chapels for the established church, foreign protestant churches, Roman catholic chapels,

meetings for dissenters of all persuasions, and three synagogues for the Jews. The royal palace of St. James is an ancient building on the north side of a small park, mean in external appearance; but the apartments are said to be the best calculated for regal parade of any in Europe. The royal town residence is a house at the west side of St. James's Park, built by the Duke of Buckingham, and purchased by the king in 1761, when it received the appellation of the Queen's Palace, but it is still called Buckingham House. Carleton House, the residence of the Prince of Wales, to the east of St. James's Palace, is a stately building, on which vast sums have been expended. The Banqueting House at Whitehall begun in 1619, is only a small part of the vast plan of a palace, intended to be worthy the residence of the British monarchs, but left incomplete. Beside the royal palaces there are many fine houses of the princes of the blood, and of the nobility and gentry. Among the public buildings which can be merely enumerated here, are Westminster Hall, containing the supreme courts of justice, and adjoining to which are the houses of Lords and Commons; the Guildhall of the city; the Sessions House in the Old Bailey; the Tower of London, an ancient fortress, once a royal palace, now containing some public offices, a magazine and arsenal, the regalia of the kingdom, the mint, and a menagerie; the Horse Guards, the Treasury, and the Admiralty, at Whitehall; the noble collection of public offices which form that magnificent structure called Somerset Place; the Royal Exchange, in Cornhill; the Bank of England, in Threadneedle-street; the Custom House, in Thames-street; the Excise Office, in Broad-street; the East India House, in Leadenhall-street; the South Sea House, in Throgmorton-street; the Mansion House for the lord mayor; the Monument, in commemoration of the great fire in 1666; the ancient Bridge called London Bridge; and the two magnificent modern bridges of Blackfriars and Westminster. The British Museum in Great Russel-street, Bloomsbury; and Week's Museum, Titchborne-street, Haymarket; are perhaps the noblest of their kind in Europe. The Inns of Court, for the study of the law; the colleges, learned societies, and public seminaries; the halls of the different trading companies; the noble hospitals and other charitable institutions; the prisons; the public places of diversion; with its fine squares and streets; all are too numerous to be here particularly mentioned.—Such on a cursory view

of it, is the metropolis of Great Britain, to the extent and opulence of which many causes have contributed. From the openness of the country round, especially on the London side, and a gravelly soil, it is kept tolerably dry in all seasons, and affords no lodgment for stagnant air or water. Its cleanliness, as well as its supply of water, are greatly aided by its situation on the banks of the Thames; and the New River, with many good springs within the city itself, farther contribute to the abundance of that necessary element. All these are advantages, with respect to health, in which this metropolis is exceeded by few. With regard to the circumstance of navigation, it is so placed on the Thames, as to possess every advantage that can be derived from a sea-port, without its dangers; and, at the same time, by means of its extensive river, enjoys a very large communication with the internal parts of the country, which supply it with all sorts of necessaries, and in return receive from it such commodities as they require. London is the seat of many considerable manufactures; some almost peculiar to itself, others in which it participates with the manufacturing towns in general. The most important of its peculiar manufactures is the silk weaving, established in Spitalfields by refugees from France. A variety of works in gold, silver, and Jewellery; the engraving of prints; the making of optical and mathematical instruments, are likewise principally or solely executed here, and some of them in greater perfection than in any other country. Thus London has risen to its present rank of the first city in Europe, with respect to opulence; and nearly, if not entirely so, as to the number of inhabitants. Constantinople can only dispute the latter with it. Its population, like that of all other towns, has been greatly over-rated, and is not yet exactly determined; but it is probable that the residents in London, Westminster, and Southwark, and all the out-parishes, do not fall short of 950,000. London is a bishop's see. To enumerate all the events by which it has been distinguished would greatly exceed our limits; we shall only mention, therefore, the great plague in 1665, which cut off 100,000 people; and the dreadful conflagration in 1666, by which 13,000 houses were destroyed. It is 400 miles south by east of Edinburgh, 225 north-west of Paris, 690 north by west of Madrid, 750 north-west of Rome, 660 west-north-west of Vienna, 334 south-east of Dublin, and 190 west-south-west of Amsterdam.

KENT is a maritime county, and in the diocese of Canterbury and Rochester. From east to west it is 58 miles, and 48 in breadth. It is divided into five lathes, containing 61 hundreds, two cities, 27 market towns, and 408 parishes; and sends ten members to parliament. In the soil and face of the country there is a great diversity. The banks of the Thames are low and marshy, but backed by a range of chalky eminences, sometimes rising to a moderate height: this kind of hard chalky soil, inclining to barrenness, extends to the north-east extremity of the county, and thence round to Dover, exhibiting its nature in the lofty white cliffs, which here bound the island, and produce the striking appearance at sea which gave it the name of Albion. This county produces, beside the usual objects of agriculture, large quantities of hops; fruit of various kinds, especially apples and cherries, of which there are large orchards; madder for dying; timber in the woody parts; and birch twigs for brooms, which form no inconsiderable article of traffic for the London markets. The principal rivers, besides the Thames, are the Medway, Darien, Stour, Cray, and Rother. The chief towns are, Maidstone, Canterbury, Chatham, Rochester, Greenwich, Woolwich, Bromley, Deal, Deptford, Sheerness, and Queenborough (in the island of Sheppey); Dartford, Dover, Sandwich, Romney, and Hythe, are called Cinque Ports.

Canterbury is an archbishop's see, the metropolitan of all England. The cathedral, a large structure, was once famous for the shrine of Thomas Becket, visited by pilgrims from all parts of Europe. This turbulent priest, having been murdered here in 1170, was afterwards made a saint; miracles were pretended to be performed at his tomb, and, 100,000 pilgrims, visitors to this tomb, have been registered at one time in Canterbury, where the devotion to him had quite effaced the adoration of God, and even of the Virgin. At the altar of God, for instance, there was offered, in one year, £3, 2s. 6d.; at the Virgin's, £63. 5s. 6d.; at St. Thomas's, £832. 12s. 3d. The next year the disproportion was still greater; there was not a penny on God's altar; the Virgin gained only £4. 1s. 8d.; but St. Thomas had got £254. 6s. 3d. Louis VII. of France made a pilgrimage to this tomb, and bestowed on the shrine a jewel esteemed the richest in Christendom. But Henry VIII. in 1538, not only pillaged this rich shrine, but caused the saint to be cited in court, tried, and condemned as a traitor; order-

ing his name to be struck out of the calendar, his bones to be burnt, and his ashes thrown into the air. In this cathedral are interred Henry IV. and Edward the Black Prince. The city has 14 parish churches, the remains of many Roman antiquities, and an ancient castle, with walls and a deep ditch.

Rochester is a bishop's see, and has, beside the cathedral, three parish churches. It has two free-schools, one called the King's, and the other the City School. Here is also an alms-house for six poor travellers, who are supplied with a supper, a bed, and a breakfast, with fourpence to carry them forward on their journey; but they are to stay no longer than one night; and an inscription over the door intimates, that rogues and proctors are excepted. It is 27 miles south-west of Canterbury.

SURRY is 36 miles long and 23 broad. It lies in the diocese of Winchester; contains 13 hundreds, 11 market towns (including Southwark) and 150 parishes; and send 14 members to parliament. The principal rivers, besides the Thames (which is the boundary of this county on the north) are, the Mole, Wey, and Wandle. The leet assizes are held at Kingston, and the summer assizes at Guildford and Croydon alternately; besides which, Southwark, Epsom, Richmond, Ryegate, Leatherhead, and Dorking, are principal towns.

SUSSEX is a maritime county, 80 miles long and 24 broad. It lies in the diocese of Chichester; contains 65 hundreds, one city, 13 market towns, and 312 parishes; and sends 20 members to parliament. The air is often thick and foggy, but not unwholesome, unless it be in the low marshy lands; the soil in the middle is rich and fruitful, and the north side is shaded with extensive woods. Sussex is not distinguished for any manufacture but that of gunpowder, at Battle; and of needles at Chichester. The principal rivers are, the Arun, Adur, Ouse, and Rother. The city of Chichester, Lewis, East Grinstead, and Brighton, are the chief towns. Hastings, Rye, Winchelsea, and Seaford; are called Cinque Ports. Chichester is the capital.

BERKSHIRE is about 42 miles in length from east to west, its breadth from north to south 28½ miles, and in circumference it is 120. It is divided into 22 hundreds.

The market towns, twelve in number, are, Maidenhead, Reading, Faringdon, Abingdon, Wantage, East Ittle, Wallingford, Hungerford, Newbury, Lambourne, Windsor, and Oakingham: it contains 140 parishes, lies in the diocese of Salisbury and province of Canterbury, and sends nine members to parliament. The air, in general, is very wholesome. The principal rivers are, the Thames, Kennet, Lamborn, and Loddon. The east part has much uncultivated land, as Windsor Forest and its appendages; the west and middle parts produce grain in abundance. Reading is the county town.

HAMPSHIRE is a maritime county. It extends, exclusive of the Isle of Wight, 42 miles from north to south, and 38 from east to west. It contains nine hundreds, one city, 20 market towns, and 253 parishes, and sends, with the Isle of Wight, 26 members to parliament. It is one of the most agreeable, fertile, and populous counties in England. The commodities are, corn, hops, bacon, honey, and timber; the last in particular, on account of its great woods, of which the principal are, the New Forest (in making of which William the Conqueror destroyed 36 churches) and the forest of East Bere. The principal rivers are, the Avon, Test, Itchen, and Stour.

Southampton is the county town, and is situate between the rivers Itchen and Test. It contains five churches, is surrounded by walls and several watch-towers, and had a strong castle, but it is now in ruins. It is a fashionable place of resort for sea-bathing; and it was on this beach that the Danish king Canute gave that striking reproof to his flattering courtiers, when the disobedient tide washed his feet. A small distance from this town is Woodmills, where is a very curious manufacture of ship blocks, from which all the king's dock-yards are supplied. The assizes are held at Winchester, which was a place of great note in the time of the Saxons.

The other chief towns are, Portsmouth, Andover, Basingstoke, and Christchurch. Cowes, Newport, Yarmouth, Newton, and Ride, are in the Isle of Wight, which is included in Hampshire.

WILTSHIRE is so called from the town of Wilton, once its capital. It is 54 miles long and 33 broad. The air is sweet and healthy, though something sharp on the hills in winter; but it is mild during that season in the valleys.

The land in the north parts is generally hilly and woody, but very fertile : here being made that kind of cheese which is so much esteemed, called North Wiltshire. Its chief commodities are, sheep, wool, wood, and stone : of this last there are excellent quarries on the banks of the Nadder, where some of the stones are 20 yards in length, and four in thickness, without a flaw. The chief manufactures are the different branches of the clothing trade. The principal rivers are, the Upper and Lower Avon, the Madder, Willy, Bourne, and Kennet. This county lies in the diocese of Salisbury ; contains 29 hundreds, one city, 20 market towns, and 304 parishes ; and sends 34 members to parliament. The chief towns are, the city of Salisbury, Devizes, Marlborough, Malmesbury, Wilton, and Chippenham.

Salisbury is the capital. It is situate in a chalky soil, almost surrounded by the Avon and its contributory rivers, and is rendered particularly clean by a small stream flowing through every street. It has a fine cathedral, crowned by a spire, the loftiest in the kingdom. The town-hall is a handsome building, and stands in a spacious market-place. Salisbury is governed by a mayor, recorder, &c. and has a manufacture of flannels and linseys, and another of hardware and cutlery. It is 21 miles north-east of Southampton.

DORSETSHIRE is a maritime county, extending 52 miles in length, 30 where broadest, and is 150 miles in circumference ; it lies in the diocese of Bristol, sends 20 members to parliament, and contains 3½ hundreds, 15 market towns, and 248 parishes. The air on the hills is somewhat bleak and sharp, but very mild and pleasant near the coast. The soil is generally rich and fertile, though in some parts very sandy. The principal rivers are, the Stour, Frome, Piddle, Liddon, Derelish, and Allen. The chief towns are, Dorchester, Lyme, Sherborn, Shaftesbury, Pool, and Blandford. The products are, corn, wool, hemp, fine stone, and some marble. It is also distinguished for its woollen manufactures.

Dorchester is the county town, and is of great antiquity ; was formerly a city, and much larger, the ruins of the walls being still to be seen in some places. It has three churches, sends two members to parliament, is governed by a mayor, &c. and is seated on the river Frome.

SOMERSETSHIRE is a maritime county ; 66 miles long and 28 broad. It contains 42 hundreds, three cities, 35

market towns, and 385 parishes; and sends 18 members to parliament. The air in the lower ground is universally mild; and the soil in the north-east quarter is generally stony, and possesses a lofty mineral tract called the Mendip Hills. On the west side are the Quantock Hills, with many downs and open heaths: and in the north-west corner is the black sterile region of Exmoor. The south part, towards Dorsetshire, is high, but well cultivated: and throughout the county, especially in its south-west quarter, vales of the greatest fertility are interspersed. The principal rivers are, the Parret, Ivel, Thone, Brent, and Avon. The Mendip Hills afford abundance of coal, lead, calamine, copper, manganese, bole, and red ochre. Cattle, nearly equal in size to the Lincolnshire, are fed in fine meadows about the head of the Parret. Cider is a common product of this county; and it has a considerable share in the woollen manufactures. The chief towns are, the cities of Bath, Wells, and Bristol; Taunton, Bridgewater, Ilchester, Minehead, Milbourn Port, and Glastonbury.

Bristol is the capital. It is seated at the confluence of the river Avon with the Frome, ten miles from the influx of the Avon into the Severn. The tide, rising to a great height in these narrow rivers, brings vessels of considerable burden to the quay, which extends along the inner shores of the Frome and Avon; but, at low water, they lie aground in the mud. It has 18 churches, besides the cathedral, a bridge over the Avon, a custom-house, and an exchange. Bristol has a prodigious trade; for it is reckoned that hence 200 ships sail yearly. Here are no less than fifteen glass-houses; and the sugar refinery is one of its principal manufactures. It is governed by a corporation; and is twelve miles west-north-west of Bath.

DEVONSHIRE is a maritime county. It is 73 miles long and 53 broad; it lies in the diocese of Exeter; contains 33 hundreds, 28 market towns, and 394 parishes; and sends 26 members to parliament. The air is healthful in the valleys, and so mild that the myrtle grows unsheltered; but it is cold and bleak on the mountains. The soil is various, for the lower grounds are naturally fruitful, and the hills barren. In the south-west parts are great quantities of marble, and in many places marble rocks are found to be the basis of the high road. The principal rivers are, the Tamar, Ex, Teigne, and Dart. Exeter is the principal city. The market towns are, Plymouth, Barnstaple, Bideford, Tiverton,

ton, Honiton, Dartmouth, Tavistock, Holdsworthy, Hatherleigh, Torrington, Oakhampton, Bow, Crediton, Chumleigh or Chumleigh, Moreton, Hampstead, Plympton, Modbury, Kingsbridge, Totness, Brent, Ashburton, Chudleigh or Chidleigh, Beerhalston, &c.

Exeter is situate on the Ex, from which it takes its name, over which is a handsome stone bridge. It was formerly the seat of the Saxon kings, who resided in the castle: and is encompassed with a wall, in which are six gates, in good repair. There are fifteen parish churches, and four chapels of ease, besides the cathedral, which is a magnificent fabric. Ships of burden formerly came up here: but the navigation was almost destroyed by Henry Courtney, Earl of Devon, and, though repaired, could not be restored to its former state: its port, therefore, is at Topsham, five miles below. It has 13 companies of tradesmen, manufactures of serges, and other woollen goods, and a share in the fisheries of Newfoundland and Greenland. It is governed by a mayor, recorder, 24 aldermen, &c. and sends two members to parliament; and is 68 miles south-west of Bristol.

CORNWALL is a maritime county. Its length from east to west is about 80 miles; its greatest breadth from south-south-east, to north-north-east, is near 45, though in many places it is not above 20 miles wide, the peninsula of which the county consists growing narrower by degrees from Devonshire to the Land's End. However, it is 150 miles in circumference. It is in the diocese of Exeter, and province of Canterbury, and is divided into nine hundreds; in which are contained, according to Camden and Speed, 161 parishes; according to others, 180; and in Martin's Index Villaris they are said to amount to 198. There are here 20 market towns, of which Bodmyn, Camelford, Powey, St. Germans, Gramport, Helston, St. Ive's Kellington, Launceston, Liskard, East Looe, Penryn, Saltash, Tregony, and Truro, are boroughs, and send two members each to parliament; besides St. Austle, Bodecastle, St. Columb, Falmouth, Market Jew, Padstow, Penzance, and Stratton, which send no members. There are also six other boroughs, which send each two members to parliament, but are not market towns, namely, Bossiney, West Looe, Lestwithiel, St. Maws, St. Michael, and Newport. This county is mountainous in the middle, and these mountains from a kind of broken chain throughout the whole length of the county. On each side this high ridge the land has a plainer surface, but is rather

more hilly on the north than on the south. The winters here are much more mild than in any other part of England, insomuch that myrtles will always grow, without being put into green houses. They never have any very great hail-storms, nor will the snow lie upon the ground above three or four days. The spring is always very early, as appears from the buds and blossoms. However, the summers, though Cornwall lies so far to the south, are never very hot, on account of the sea breezes blowing towards the land. It has plenty of sea herbs, and some other plants peculiar to its insular situation. The mines of tin are numerous, and are, in general, very rich in ore: these have rendered this county famous in all ages. There has been sometimes found a small quantity of gold and silver, but not worthy of notice. The copper mines are also numerous and rich in ore. In many cavernous parts of the rocks are found transparent crystals, called Cornish diamonds, they being very brilliant when polished. The principal rivers are, the Tamar, Seaton, Loo or East Loo, Fawey or Fowey, Fal, Hel, Lo or Low, Hey, Alan, Laine, and the Lery. It sends 44 members to parliament.

WALES.

WALES, a principality in the west of the island of Great Britain, is for the most part mountainous, but its produce is sufficient for the maintenance of the inhabitants. It is the country to which the ancient Britons fled when this island was invaded by the victorious Saxons. They are now called Welsh, and continue to preserve their ancient language. The western part is bounded by St. George's Channel and the Irish Sea; the southern by the Bristol Channel; the northern by the Irish Sea; and the eastern by the counties of Chester, Salop, Hereford, and Monmouth. It contains 751 parishes, and 58 market towns. The air is clear and sharp, the cattle small, and provisions, in general, good and cheap. Wales is particularly remarkable for goats, which naturally delight in hilly countries; for fuel, they use wood, coal, and turf. It is watered by many rivers. Wales was long governed by independent kings, till their last prince, Llewellyn, being vanquished and slain in 1283, Edward I. reduced the whole country under the English dominion. He also invested the principality in his second son Edward, who afterward becoming heir to the English monarch, the eldest son of the King of England has ever since been created Prince of Wales. At the reign of Henry VIII.

the government and jurisprudence of Wales were modelled according to the English form, and the inhabitants admitted to the enjoyment of all the English rights and liberties, particularly that of sending members to parliament, a knight for every shire, and a burgess for every shire-town, except Merioneth. Wales is divided into 12 counties, as follows :

<i>Counties.</i>			<i>Chief Towns.</i>
Flintshire	-	-	Flint
Denbighshire	-	-	Denbigh
Montgomeryshire	-	-	Montgomery
Anglesea	-	-	Beaumaris
Carnarvonshire	-	-	Carnarvon
Merionethshire	-	-	Harlech
Radnorshire	-	-	Radnor
Brecknockshire	-	-	Brecknock
Glamorganshire	-	-	Cardiff
Pembrokeshire	-	-	Pembroke
Cardiganshire	-	-	Cardigan
Carmarthenshire	-	-	Carmarthen.

SCOTLAND.

SCOTLAND, or NORTH BRITAIN, the most northern of the two kingdoms into which the island of Great Britain was formerly divided, is inhabited by a valiant, hardy, industrious, well informed, and temperate race of people. It is bounded on all sides by the sea, except towards the south and south-east, where it is joined to England. The islands also, on its western coast, called the Hebrides, or Western Islands, and those on the north-east, called the Orkney, and Shetland Islands, appertain to Scotland. From north to south, Scotland extends about 270 miles, and from east to west, in some parts, 150 miles, but in others only 30. Exclusively of the islands, Scotland seems to be naturally divided into three large districts. The northern division is formed by a chain of lakes, which cross the country from the Frith of Murray to the island of Mull. The middle division is bounded on the south by the Friths of Forth and Clyde, and the great canal by which they are united; and on the south side of this boundary is the southern division. The northern division is chiefly an assemblage of vast dreary mountains; not, however, without some fertile valleys on

the northern and eastern shores. The middle division is traversed, in different directions, by many great ranges of mountains ; and though cultivation here is also found, especially on the eastern shore, yet of this division, as well as of the former, it may be observed, that the arable land bears but a small proportion to the mountainous and barren tracts. However, the eastern coast of the middle division, and the whole of the southern, has a great resemblance to England, and, with respect both to the general aspect of the country, and to the progress of cultivation, exhibits every kind of rural variety. •

The rivers of Scotland are, in general, remarkable for their rapidity, and yield abundance of salmon, trout, and other excellent fish ; the principal are, the Spey, Don, Tay, Tweed, Clyde, Forth, the northern Dee, the Esk, Annan, Nith, and southern Dee ; and the lochs or lakes are numerous and extensive.

The climate is very various in different places. The northern extremity, which is in the same latitude with some parts of Norway, is extremely cold ; but the frosts are far from being so intense here as in parts on the continent equally as far to the north ; for this advantage Scotland is indebted to an insular situation. Its west coast is subject to frequent rains in the summer, and to sudden changes of weather. In many places on the eastern shore, and in the whole south division, the climate is not inferior to the north part of England ; and, in general, the air of Scotland is very healthy.

The products of the country are, grain, flax, woods of oak and fir, coal, lead, iron, freestone, limestone, slate, the most beautiful marble, fine rock crystals, pearls, variegated pebbles, kelp, &c. It feeds vast herds of cattle and flocks of sheep ; they are both small, but much valued for the delicacy of their flesh ; and the fleece of the latter emulates the finest Spanish wool. It is in the high ground that the cattle are so diminutive ; for in many parts of the country the horses and cows are not excelled in size and beauty by those of the English breed. Among the wild animals are, the roe, stag, fox, badger, otter, hedgehog, rabbit, weasel, mole, and other small quadrupeds. Among the feathered race are, the capercaillie, or cock of the wood, the eagle, falcon, partridge, quail, snipe, plover, black-game, grouse, &c. The fisheries in the surrounding seas, are of great national importance, and will become a real source of wealth to the nation, when increasing commerce shall

enable the inhabitants to form roads, erect villages, and open canals in the remote parts of the country. The trade and population of most of the great towns have considerably increased of late years. The western shores, however, are annually drained of their inhabitants by the emigration of individuals.

Scotland was an independent kingdom till James VI. was called to the throne of England; and in the reign of Queen Anne, one of his successors, both kingdoms were united under the name of Great Britain. Sixteen peers are elected to represent the nobility, and forty-five commoners to represent the counties and boroughs in the same parliament with that of England. There are five universities in Scotland, namely, St. Andrews, Glasgow, Edinburgh, New Aberdeen, and Old Aberdeen.

Scotland is divided into 33 counties, as follow :

<i>Counties.</i>	<i>Chief Towns</i>
Edinburgh - - - - -	Edinburgh
Haddington - - - - -	Dunbar
Merse - - - - -	Dunse
Roxburgh - - - - -	Roxburgh
Selkirk - - - - -	Selkirk
Peebles - - - - -	Peebles
Lanark - - - - -	Glasgow
Dumfries - - - - -	Dumfries
Wigtown - - - - -	Wigtown
Kirkcudbright - - - - -	Kirkcudbright
Ayr - - - - -	Ayr
Dumbarton - - - - -	Dumbarton
Bute and Caithness - - - - -	Rothsay
Renfrew - - - - -	Renfrew.
Stirling - - - - -	Stirling
Linlithgow - - - - -	Lialithgow
Argyle - - - - -	Inverary
Perth - - - - -	Perth
Kincardine - - - - -	Brechin
Aberdeen - - - - -	Aberdeen
Inverness - - - - -	Inverness
Nairn and Cromartie - - - - -	Nairn and Cromartie
Fife - - - - -	St. Andrews
Forfar - - - - -	Montrose
• Banff - - - - -	Banff
• Sutherland - - - - -	Durnoc
Clackmannan - - - - -	Clackmannan

<i>Counties.</i>	<i>Chief Towns.</i>
Kinross - - - - -	Kinross
Ross - - - - -	Taine
Elgin - - - - -	Elgin
Orkney - - - - -	Kirkwall.

Berwick, a town on the borders of England and Scotland, properly belongs to neither. It is a town and county of itself ; it is large, populous, well built, and regularly fortified ; the old castle, however, is gone to decay. Berwick has very considerable fisheries of salmon : exports wool, and eggs, collected through all the country, in vast abundance, to London, for the use of sugar-refiners. Timber is also imported here from Norway and the Baltic.

IRELAND.

IRELAND, one of the British islands, lying to the west of that of Great Britain, is bounded on the east by St. George's Channel, or the Irish Sea, which separates it from England and Wales ; on the north-east by a channel about 20 miles broad, which separates it from Scotland ; and on every other side by the ocean. It lies between lon. 5. 43. and 10. 38. west, and between lat. 51. 15. and 55. 13. north, being about 287 miles in length, and 155 in breadth.

The air of this island is mild and temperate, being cooler in summer, and warmer in winter, than in England ; though it is not so clear and pure, nor so proper for ripening corn and fruits. It is more humid than in England ; but this quality is pretty much mended, and will be more so, when the bogs and morasses are drained. In general it is a fruitful country, well watered with lakes and rivers ; and the soil in most parts is very good and fertile ; even in those places where the morasses have been drained, there is good meadow-ground. It produces corn, hemp, and flax, in great plenty ; and the herds of cattle are so numerous, that their beef and butter are exported into foreign parts. English and foreign ships frequently come to victual in Irish ports.

The principal riches and commodities of Ireland are, cattle, hides, wool, tallow, suet, butter, cheese, wood, salt, honey, wax, furs, hemp, and more especially fine linen cloth, which they have brought to great perfection, and their trade in it is vastly increased ; they have also made some progress in the cotton manufacture. This country is exceedingly well situate for foreign trade, and has many

secure and commodious bays, creeks, and harbours, especially on the western coast.

The laws of Ireland once differed but little from those of England; and the national establishment of religion was the same. The members of parliament usually sat for life, unless upon the demise of the king of Great Britain; but in 1763 their parliaments were made octennial. Formerly this country was entirely subordinate to that of Great Britain, whose parliament could make laws to bind the people of Ireland; and an appeal might be made from their courts of justice to the house of lords in England; but, in 1782, it was declared, that although Ireland was an imperial *crown*, inseparably annexed to that of Britain, (on which connection the interest and happiness of both nations essentially depended,) yet the *kingdom* of Ireland was distinct, with a parliament of its own, and that no body of men were competent to make laws for Ireland, except the king, lords, and commons thereof. And some time after, this declaration being thought insufficient, the British legislature, by an express act of parliament for that purpose, relinquished all claim of right to interfere with the judgment of the Irish courts, or to make laws to bind Ireland in time to come. However, from the circumstances of the times, in 1801, a legislative union between Great Britain and Ireland took place, (after strong parliamentary opposition in both countries,) by which the two kingdoms were made one, under the title of the United Kingdom of Great Britain and Ireland. In consequence of which, Ireland now sends four spiritual and 28 temporal lords, and 100 commoners, to represent it in the same house of parliament with those of Great Britain. The lord lieutenant of Ireland, as well as the council, are appointed, from time to time, by the king.

The native Irish are described as impatient of abuse and injury, quick of apprehension, implacable in resentment, ardent in all their affections, and remarkably hospitable. In the country there certainly remains a great deal of this amiable national characteristic; and even in their towns, formality and etiquette are often so lost in hearty salutations, and a familiar manner of address, that the stranger soon feels himself at home, and imagines the people about him all relations.

There are some considerable mountains in Ireland, the chief of which are, Knock Patrick, Sliew Blockmy, and Curlew Hills. Of all its bogs, that called the Bog of Allen is the most considerable. The chief lakes are Lough Lean,

Lough Erne, Lough Neagh, and Lough Coribb; and its principal rivers are the Shannon, Lee, Boyne, Barrow, Liffey, Nore, Suir, and Lagan. This country is said to have been formerly full of woods; but the case is now so different that it has been found necessary to plant new ones, and to give parliamentary encouragement for their preservation and increase.

The mineral productions of Ireland have been little known till late years, the natives in general having given themselves (at least for some centuries past) little trouble about them. Nevertheless, copper, lead, iron, and even silver ores, have been found in the Irish mines; some vestiges of works of this sort appear at Clantarf, on the edge of Dublin Bay. In the county of Antrim there is a mine which consists of a mixture of silver and lead, every thirty pounds of lead ore producing about a pound of silver. There is another in Connaught of the same kind; and one still richer in Wicklow. About twelve miles from Limerick two mines have been discovered, one of copper, and the other of lead. Iron mines are dispersed all over the kingdom. There are likewise quarries of marble, slate, and freestone; and the earth produces in various places coal and turf for fuel.

Ireland is divided into four large provinces; namely, Ulster northward, Leinster eastward, Munster southward, and Connaught westward. These are subdivided into 32 counties, as follow:

<i>Counties.</i>	<i>Chief Towns</i>
Dublin - - - - -	Dublin
Louth - - - - -	Drogheda
Wicklow - - - - -	Wicklow
Wexford - - - - -	Wexford
Longford - - - - -	Longford
East Meath - - - - -	Trim
West Meath - - - - -	Mullingar
King's County - - - - -	Philipstown
Queen's County - - - - -	Maryborough
Kilkenny - - - - -	Kilkenny
Kildare - - - - -	Naas
Carlow - - - - -	Carlow
Down - - - - -	Downpatrick
Armagh - - - - -	Armagh
Monaghan - - - - -	Monaghan
Cavan - - - - -	Cavan
Antrim - - - - -	Carrickfergus

<i>Counties.</i>	<i>Chief Towns.</i>
Londonderry - - - -	Derry
Tyrone - - - - -	Omagh
Fermanagh - - - -	Inniskilling
Donegal - - - - -	Lifford
Leitrim - - - - -	Ballinrobe
Roscommon - - - -	Roscommon
Mayo - - - - -	Carrick on Shannon
Sligo • - - - - -	Sligo
Galway - - - - -	Galway
Clare - - - - -	Ennis
Cork - - - - -	Cork
Kerry - - - - -	Tralee
Limerick - - - - -	Limerick
Tipperary - - - -	Clonmell •
Waterford - - - - -	Waterford

GENERAL SUMMARY OF EUROPE.

<i>Nations.</i>	<i>Chief Cities.</i>	<i>Religion.</i>	<i>Rev. to m.</i>	<i>Government.</i>
Sweden	Stockholm •	3 Lutheran	1	Monarchy
Russia	Petersburg	36 Greek Chu.	10	Despotism
Denmark	Copenhag.	3 Lutheran	1½	Monarchy
Prussia	Berlin	8 Protest. and Rom. Cath.	4	Monarchy
Batavia	Amsterdam	3 Protestant	4	Monarchy
German St.	Dresden	8 Protestant	4	Aristocracy
Austria	Vienna	23 Rom. Cath.	10	Monarchy
Turkey in Europe	Constanti- nople	8 Mahomet- ism		Despotism
France •	Paris	32 Rom. Cath.	25	Monarchy
Switzerland	Berne	2 Protest. and Rom. Cath.	1	Aristocracy
Italy	Milan	4 Rom. Cath.	1	Monarchy
Etruria	Florence	2 Rom. Cath.	1	Monarchy
Pope's Stat.	Rome	2 Rom. Cath.	1	Hierarchy
Naples	Naples	2 Rom. Cath.	2	Monarchy
Portugal	Lisbon	4 Rom. Cath.	2	Monarchy
Spain	Madrid	11 Rom. Cath.	5½	Monarchy
Great Brit. and Ireland	London	15 Protestant	33	Limited Monarchy

ASIA.

IN ASIA our first parents were created ; it also became the nursery of the world after the deluge ; it was the seat of the famous Babylonian, Assyrian, and Persian empires ; and was the scene in which Jesus Christ exerted himself to reform and save the human race. The Christian religion, though first promulgated in Asia, has however been long banished from it.

The Asiatics are chiefly Mahometans, or Pagans, and among the latter idolatry puts on a different form in almost every district.

The southern Asiatics are in general effeminate, luxurious, indolent, and servile ; but they evince considerable genius in various arts and sciences.

Asia may be reckoned the richest and most fruitful part of the world. It abounds in corn, wine, and fruits of all sorts. It furnishes every thing necessary for life and health—to satisfy vanity, avarice, and sensuality. It supplies almost all the other parts of the world with the richest spices, drugs, diamonds, and other precious stones ; with silks, muslins, coffee, tea, &c.

The principal islands in Asia are, Borneo, Sumatra, Java, and the Sunda Isles ; the Philippines, the Japan Isles, the Molucca or Spice Islands *, the Banda Islands, the Maldives ; Ceylon, Formosa, the Ladrone Isles, the islands of Jesso in the Indian and Pacific Oceans, and Cyprus in the Mediterranean.

The oceans and seas adjoining Asia are, the Northern, Indian, and the Pacific Oceans ; the Black Sea, the Seas of Korea, Tonquin, and Siam ; the Bay of Bengal, the Arabian and Red Seas, the Persian Gulf, the Levant, and the Archipelago. The Caspian Sea is properly an immense lake, having no connection with any other portion of water.

The principal straits in Asia are, Bhering's, which separates it from America ; the Strait of Malacca ; of Sunda, between Java and Sumatra ; of Ormuz, between Persia and Arabia ; and of Babelmandel, which separates Arabia from Africa.

* Spices are now cultivated in Prince of Wales's Island in Sumatra, and other elements of the English East India Company.

The chief rivers of Asia are, the Kian Ku, the Koan Ho, the Lena, the Yenisci, and the Ob; the Amur, the Bar-rampooter, the Ganges, the Euphrates, and Indus.

The Asiatic mountains are not so high as those of Europe; the following are the principal; the Uralian, the Altain, the Shamo, those of Thibet, the Alsk, the Taurus, the Ghauts of Hindoostan, and the Caucassian, which last reach from the Black to the Caspian Sea.

TURKEY IN ASIA.

The climate of TURKEY IN ASIA is delightful and salubrious; but that dreadful scourge to mankind, the plague, is rendered doubly destructive to this wretched empire from the native indolence of the Turks, and from their superstitious belief in predestination.

Turkey is divided into several provinces; as, Natolia, Kaarmar, Armenia, Mingrelia, &c.* These provinces are subdivided into different governments under pachas.

The prevailing language is the Turkish, next to which is the Greek; but the Arabic, Syrian, Persian, and Armenian, are used in different parts.

The principal cities are, Smyrna, Aleppo, and Bagdad. Balbec and Palmyra are famous for their extensive ruins.

The principal river in Asiatic Turkey is the Euphrates; next to this is the Tigris.

The mountains in Asiatic Turkey have long been celebrated: these are, Taurus, Libanus, and Ararat. On the last Noah's ark is said to have rested after the Flood.

The chief islands are, Mytelene, Scio, Samos, Cos, Rhodes, and Cyprus; which produce cotton, silk, oil, fruits, and wines. Turkey is famous for its carpets and rhubarb.

* In Natolia, or Asia Minor, were the seven churches of Asia, mentioned in the Book of Revelation; namely, Pergamos, Laodicea, Philadelphia, Thyatira, Sardis, Ephesus, and Smyrna; but these places, except Smyrna, are mostly in ruins.

South of Natolia is that part which is usually called the Holy Land, on account of its having witnessed the labours of Jesus Christ. It is also called Judea, from the patriarch Judah. The river Jordan is now a very small stream, that empties itself into the Red Sea, near the spot where Sodom and Gomorrah once stood.

Armenia is also styled Turcomania; to the south of which are Kurdistan and Irak Arabia, in which is the celebrated Bagdad.

The ancient Mesopotamia, between the Tigris and Euphrates, corresponds with Diarbeckh, or Algezira. Syria, or the ancient Canaan, is situate on the eastern extremities of the Mediterranean.

RUSSIA IN ASIA.

This vast portion of northern Asia was first known by the name of Siberia. It is divided into two great governments, that of Tobolsk in the west, and Irkutsk in the east. The principal city in Asiatic Russia is Astrachan.

The produce of the north consists of furs and skins ; in the south there is abundance of fruit, wine, &c.

The Kurilian Islands belong to Asiatic Russia ; they extend from Kamtschatka to Jesso.

THE CHINESE EMPIRE.

CHINA is celebrated for its immense and industrious population of upwards of three hundred millions ; for the variety of its manufactures and peculiar productions ; for the excellence of its inland navigation ; and for the jealous policy of its government towards other nations. This empire, the most ancient and populous in the world, consists of three principal divisions ; namely, China Proper ; the territory of the Manchurs and Moguls, on the north and west ; and the region of Thibet. The celebrated wall of China, though built two thousand years ago, is but little decayed : it is fifteen hundred miles long, and broad enough for five horsemen to travel abreast.

CHINA PROPER extends from the great wall in the north to the Chinese Sea in the south ; and from the shores of the Pacific Ocean to Thibet.

The chief cities are, Peking, Nankin, and Canton. Peking contains two millions of inhabitants, and the others not less than one million each. The imperial canal intersects China from north to south, and employed thirty thousand men forty-three years for its construction.

Corea is subject to China, and is considered as a part of it. The largest of the Chinese islands, which are very numerous, and scattered along the southern and eastern coast, are Formosa and Hainan. The islands of Loo-keoo, of which there are thirty-six, between Formosa and Japan, constitute a small civilized kingdom, subject to China.

The chief rivers are the Kiang and Whango.

China has rich mines of all the precious metals. It produces abundance of corn, rice, and fruit.

CHINESE TARTARY is included between the great wall of China and Siberia, and between the Cloudy Mountains and the Pacific Ocean. It is inhabited chiefly by the eastern and western Moguls ; the former conquered China in 1

under whose government the empire still continues. It produces gold, rice, and valuable skins.

The island of Segalien, or Tchoka, belongs to Chinese Tartary.

THIBET is included between China and Hindoostan. The chief town is Lassa.

The islands contiguous to the Chinese Empire, beside those already noticed, are,

1. Those of Japan, forming an extensive, rich, populous, and remarkable empire. The largest island is Nippon; and the chief towns are, Jeddo, Miaco, the spiritual capital, and Nagasaki. These islands trade only with the Dutch and Chinese.

2. The Jessø islands, to which the Danes trade for furs.

3. Macao lies in the Bay of Canton, and belongs to the Portuguese.

There are many small islands dependent on Japan; among which is Fatfisio, the place of exile for the disgraced grandees.

THE BIRMAN EMPIRE.

Malacca, Siam, Laos, Cambodia, Siampa, and Cochin China.

- The Birmanians are separated from the Hindoos by a very narrow range of mountains; but the dispositions of the two people are extremely different. The Birmanians are a lively, inquisitive race, irascible and impatient.

The Birman Empire is divided from Asam on the north; on the west a range of mountains separates it from the British dominions in Bengal. The capital city is Ava. Pegu, south of Ava, is supposed to be the Golden Chersonese of the ancients. This empire extends its dominion over Laos and Cambodia, and is divided by deserts and mountains from Cochin China and Tonquin. Ava, the present capital, and Pegu, which was formerly so, are both going to decay.

The Birmanians, like the Chinese, have no coin; but silver in bullion, and lead, are current among them. The forests in this empire are large and numerous; the teak tree is lord of them, and superior to the European oak.

Malaya, or Malacca, is a large peninsula, containing several kingdoms and provinces. The inhabitants are called Malays, or Malayans. This country is celebrated for its numerous wild elephants. Opposite to the coast of Malacca are the islands of Andaman and Nicobar. On a barren isle to the east of the Andamans is a volcano, which emits showers of red-hot stones. A British settlement has been

The kingdom of Siam is situate in a large vale between two ridges of Mountains. The river Meinan, which signifies the *mother of waters*, is celebrated among oriental rivers. The elephants of Siam are distinguished for sagacity and beauty. The trees on the banks of the Meinan are finely illuminated with swarms of fireflies, which emit and conceal their light as uniformly as if it proceeded from a machine of the most exact contrivance.

Cambodia is celebrated for the camboge gum.

The chief river in Tonquin China is Holi Kian, which passes by Kesho, the capital.

HINDOOSTAN.

The population of the parts of Hindoostan subject to Great Britain, amounts to fourteen millions; and the revenue derived from them is computed at four millions sterling.

British India consists of certain immense territories on the banks of the Ganges, of which Calcutta* is the capital—of others on the coast of Coromandel, of which Madras is the capital—of the newly acquired island of Ceylon—and of the island of Bombay. Madras is the chief English factory. Bombay, on the Malabar coast, is the chief British settlement on the western side of India.

Hindoostan, in other respects is divided into four sections:

1. That part occupied by the Ganges and its principal branches, which includes Bengal, Bahar, Oude, Agra, &c.
2. That occupied by the course of the river Indus, containing Cashmir, Candahar, Lahore, &c.
3. The tract situate between the river Kistna and the two former divisions.
4. The western coast is called that of Malabar, and the eastern that of Coromandel. In this part is included the island of Ceylon.

The chief rivers of Hindoostan are the Indus, Ganges, and the Barrampooter.

The Laccadive and Maldive Islands, west of Hindoostan and Ceylon, are unimportant, but very numerous; the Maldives are said to be more than thirteen hundred in number.

* This beautiful city (of which an elegant engraving accompanies the present edition,) stands on the river Hugully, a branch of the Ganges, 100 miles from the sea. It is a large and populous city, containing 300,000 inhabitants. The part inhabited by the English is elegantly built; but the rest, and that the greatest part, is built after the fashion of the cities of Hindoostan. The citadel is named Fort William, and is superior as a fortress to any in India. Calcutta is the emporium of Bengal, and the residence of the governor general of India. In this city is the infamous black hole, a room only eighteen feet square, into which one hundred and forty-five English were thrust in 1758 by a native prince, of whom one hundred and twenty-two died before morning.

India produces rice, sugar, diamonds, cotton, calicoes, silk, indigo, saltpetre, &c.

PERSIA.

PERSIA is divided into eastern and western, and the provinces near the Caspian Sea, which have asserted a sort of independence.

The principal towns and cities are Ispahan, the capital, Teffliz, and Gombroon. In Persia rivers and trees are very uncommon; hence the respect paid by Persian monarchs to planes and other trees that diffuse their shades. The palmetto is beautifully described by Gay :

Yet let me in some odorous shade repose,
 Whilst in my verse the fair *palmetto* grows :
 Like the tall pine it shoots its stately head,
 From the broad top depending branches spread ;
 No knotty limbs the taper body bears,
 Hung on each bough a single leaf appears,
 Which, shrivelled in its infancy, remains
 Like a closed fan, nor stretches wide its veins ;
 But, as the seasons in their circles run,
 Opes its ripp'd surface to the nearer sun.
 Beneath this shade the weary peasant lies,
 Plucks the broad leaf, and bids the breezes rise.

The singular features of Persia are mountains and deserts. On the western coast of the Caspian Sea, near Baku, are fountains of naphtha, or pure rock oil. The earth, when dug two or three inches deep, will easily take fire.

The most remarkable islands in the southern gulf are, Ormus, Kishma, and Karch. Ormus is a place of considerable trade.

From Persia are brought silks, carpets, leather, and gold and silver lace.

INDEPENDENT TARTARY.

INDEPENDENT TARTARY is celebrated as the seat of the most ancient Persian kingdom. It was afterwards distinguished by the wide empire of Jenghiz and Timur. It gave birth to many ancient men of letters, among whom were Zoroaster and Abulgazi. Such is the hospitality of the Tartars, that all the families in the country seem to belong as but to one house.

The chief divisions of Independent Tartary are,

1. The barren plains in the north.
2. To the south of the Argun Mountains is Great Bégaria.
3. On the south of the Ak-Tép Mountains are the pro.

vines of Sogd (the capital of which is Samarcand,) Balk, and Gaur.

The chief rivers are Jihon, and the Sirr, or Sion : and the most considerable lake or inland sea is that of Aral.

ARABIA.

The Arabians in general are such robbers that travellers and pilgrims are struck with terror on their approach towards this country.

The climate is very various; in some parts it is excessively hot and dry, and subject to poisonous winds; in other parts the soil is fertile, and the air highly salubrious. In the desert travellers are guided by the stars and compass, as mariners are at sea.

Arabia is divided into three parts : Arabia Stony, Arabia the Desert, and Arabia Felix, or Happy.

Stony Arabia is a small province north of the Red Sea, between Egypt and Palestine. The chief town is Suez. Between the narrow branches of the northern extremity of the Red Sea are Mount Sinai and Mount Horeb; on which are several cells or chapels, possessed by monks.

Arabia the Desert is the middle part of the country, the inhabited parts of which lie on the borders of the Red Sea. In Arabia is the wilderness through which the children of Israel were forty years in passing from Egypt to Canaan. The chief towns are Mecca and Medina; the former the birthplace of Mahomet, and the latter the place at which he was buried. The famous temple at Mecca is called the Kaba or Caaba. Mocha is a port on the Red Sea, and Aden a port near the Strait of Babelmandel.

Arabia Felix, or Happy, comprises the south-west part of the country.

Arabian horses are much esteemed. Camels and dromedaries are the common beasts of burden.

THE EASTERN ARCHIPELAGO.

THE EASTERN ARCHIPELAGO is divided into,

1. The islands of Sunda, or the Sumatran chain, which comprise Sumatra, Java, Balli, Lombock, Florez, and Timor, with several others of less importance.
2. Borneo, and some smaller surrounding islands. Borneo is the largest island in the world except New Holland.
3. The Manillas, or Philippine Islands; including Luzon,

Mindanao, Palawa, Mindora, Pany, Negros, Zebu, Leyta, Samar, and several hundred smaller islands.

4. The Celebesian Isles, namely, Celebes, Boutan, and the surrounding small islands. Boutan is governed by a Mahometan sultan.

5. The Spice Islands, including the Moluccas : these are Gilola, Ceram, Bouro, Oby, Amboyna, Banda, Tidore, Ternate, &c. These famous islands produce nutmegs, cloves, and other valuable spices.

THE AUSTRALASIA.

THE AUSTRALASIA contains the following islands :

1. New Holland, or Notasia, and all the islands between twenty degrees west, and twenty or thirty degrees east of it. New Holland is about three-fourths as large as all Europe.

2. Papua, or New Guinea, and the Papuan Isles.

3. New Britain, New Ireland, and the Solomon Isles.

4. New Caledonia and the New Hebrides.

5. New Zealand.

6. Van Diemen's Land is separated from New Holland by Basse's Strait or Channel, which is about thirty leagues wide.

THE POLYNESIA.

THE POLYNESIA consists,

1. Of the Pelew Isles.

2. Of the Ladrone, or Marian Islands ; the principal of which are Guan and Tinian.

3. Of the Carolines ; the largest of which are Hogolex and Yap.

4. Of the Sandwich Islands, discovered by Captain Cook ; at one of which, Owhyhee, he lost his life.

5. Of the Marquesas, which are very numerous.

6. Of the Society Islands, about sixty or seventy in number : Otaheite is the largest.

7. Of the Friendly Islands, and the Feejee Islands.

8. Of the Navigator's Islands, the principal of which is Maouna.

The largest island in Polynesia is Owhyhee, about one hundred miles in length.

GENERAL SUMMARY OF ASIA.

<i>Nations.</i>	<i>Chief Cities.</i>	<i>Population in millions.</i>	<i>Religion.</i>	<i>Revenue in millions.</i>	<i>Government.</i>
Turkey	Aleppo	10	Mahometan	—	Despotis.
Russia	Astrachan	5	Greek Ch.	—	Despotis.
China	Pekin and Naukin	333	Shamanism	9	Monarch.
Japan	Jeddo	30	Polytheism	28	Despotis.
Birman Empire	Ava	17	Brahmins	—	Despotis.
Siam	Siam	5	Brahmins	—	Despotis.
Hindoos- tan	Calcutta	60	Brahmins	160	Various.
Persia	Ispahan	10	Mahometan	5	Despotis.
Tartary	Samarcand	10	Mahometan	—	
Arabia	Mecca and Medina	10	Mahometan	—	Hierarc.

A F R I C A.

AFRICA, though now reduced to a state of general barbarism, chiefly by the arts and villany of slave dealers, once contained several kingdoms and states, eminent for arts and commerce. Egypt and Ethiopia were much celebrated and Carthage, the formidable rival to Rome, extended her commerce to every part of the known world.

In Africa there are no inland seas, and but one lake of any great extent, namely, that of Maravi.

The principal rivers are the Nile, the Niger, and the Senegal. In consequence of the periodical rains, these rivers overflow their banks annually from June to September, by which means they fertilize the country, and leave behind them, if canals prepared for the purpose, a sufficient quantity of water for the rest of the year. The Niger, after running more than eleven hundred miles almost due west, loses itself in the sandy deserts.

The Atlas Mountains, that reach from Morocco to Egypt, have long been celebrated; and the Mountains of the Moon a lofty range known only by name.

The most striking features of Africa consist in its immense deserts, inhabited by ferocious wild beasts, which perhaps comprise one half of the continent ; of these Zaara is the chief. The following are the principal countries :

ABYSSINIA is divided into provinces, of which the principal are Tigri, Grojam, and Dembea. Gondar is the capital.

EGYPT is a narrow vale on both sides of the Nile, bounded by parallel ridges of mountains or hills. It is divided into Upper, Middle, and Lower, which last comprehends the Delta, famed for its fertility. It is by far the most considerable part of Africa, and was once the seat, if not the parent, of science. It is governed by a Turkish viceroy or bashaw.

The chief cities are, Grand Cairo, the capital, Alexandria,* Rosetta, and Damietta. Rain is very uncommon in Egypt.

BARBARY extends from the Strait of Gibraltar to the Nile, and includes the northern Mahometan states, as Barca, Tripoli, Tunis, Algiers, Fez, and Morocco. The inhabitants of these countries are chiefly remarkable for their piracies.

GUINEA is divided into the *grain*, the *ivory*, and the *gold* coast : it supplies Europeans with slaves. The settlements in Guinea are chiefly Portuguese, from which elephants' teeth are exported. Benin, Loango, and Congo, present the most interesting objects in this wide extent of country.

CAFFRARIA, or the land of Hottentots, extends to the Cape Good Hope, the most southerly part of Africa. The port of Good Hope, in peace, is a free port for all nations.

On the western coast of Africa are innumerable tribes of people. Sierra Leone is an English settlement, formed for the civilization of the interior of Africa.

* Alexandria, the ancient capital of Lower Egypt, was built by Alexander the Great, about A. C. 333. The city was very magnificent, and was celebrated for its library, founded by Ptolemy Soter, containing 700,000 volumes. When Alexandria fell into the hands of the Saracens, its library was destroyed, and the magnificence of the city greatly impaired. Near the southern gate now stands a column of red granite, 114 feet high and 60 in circumference, called Pompey's Pillar. Although there is no proper mode of reaching the top, either within or without, yet it is related that some English sailors, in a frolic, contrived by means of a paper kite, to fly a rope to the capital, by which they fastened other ropes, and ascended to drink a bowl of punch on the top.

Zaara, or the Great Desert, extends from the Atlantic to the Nile, equal to the half of Europe; it has spots which are fertile in groves and pastures. It abounds in salt.

On the eastern side of Africa are, Natal, Sabia, Sofala, and Mocaranga.

The coasts of Mosambico and Zanguebar are succeeded by the desert regions of Ajan and Adel, which complete the circuit of Africa. These countries produce ivory, gold ostrich feathers, ebony, and drugs.

The island of Madagascar is one of the largest in the world. The Cape de Verd Islands are ten in number; the two largest are St. Jago and St. Anthony. More northerly are the Canary or Fortunate Islands; among these is the famous Peak of Teneriffe, one of the loftiest mountains on the earth, being upwards of three miles in perpendicular height. The island of Madeira, the last that is reckoned contiguous to Africa, is famous for its wine.

Africa is the country of monsters. Every species of noxious and predatory animals reign undisturbed in the vast deserts of this continent, and are multiplied by the sultry heat of the climate: even man in this quarter of the world exists in a state of the lowest barbarism.

This unfortunate condition of our own species is, however, greatly aggravated, if not solely occasioned, by those Europeans who frequent the coasts, and encourage the natives to kidnap and sell each other. This shocking traffic, which is now abolished as far as respects our own country, is the cause of perpetual intestine wars; in which the barbarous chiefs of the country attack each other's subjects for the purpose of making prisoners, and selling them for slaves.

GENERAL SUMMARY OF AFRICA.

<i>Nations.</i>	<i>Chief Cities.</i>	<i>Pop. in mill.</i>	<i>Religion.</i>	<i>Rev. in mill.</i>	<i>Government.</i>
Abyssinia	Gondar	2	Christian	—	Monarchy
Egypt	Cairo	2,	Mahometan	1	Aristocracy
Morocco	Morocco	2	Mahometan	—	Despotism
Algiers	Algiers	0½	Mahometan	—	Despotism
Tunis	Tunis	0½	Mahometan	—	Despotism
Tripoli	Tripoli	0½	Mahometan	—	Despotism

AMERICA.

AMERICA is divided into north and south, being separated by the Isthmus of Darien or Panama.

North America includes the United States, Spanish America, British America, and the independent Indian nations.

The inland seas of North America are the gulfs of Mexico, California, and St. Lawrence, with Hudson's Bay, and David's Straits. The Gulf of St. Lawrence is closed by the island of Newfoundland, and the great sand-bank, about four hundred miles in length, celebrated for the cod fishery.

The lakes Superior, Michigan, Huron, Wrennipeg, and Slave Lake, are the grandest in the world, and might with propriety be denominated Seas.

The rivers are also grand features of North America. Of these the principal are, the Missouri or Mississippi, the Ohio, and the St. Lawrence.

The most celebrated mountains are the Apalachian, passing through the territory of the United States. Among these the Ohio has its rise.

Except the Apalachian all the mountains in North America lie west of the United States.

THE UNITED STATES.

THE UNITED STATES are celebrated for their successful struggle against the arms of Great Britain, and for their constitution, which provides for political liberty and individual security. The inhabitants are famed for their ardent love of freedom, for their hospitality and industry, and for the great attention which they pay to agriculture and commerce.

The United States are divided into northern, middle, and southern.

The northern States are, Vermont, New Hampshire, Massachusetts, Connecticut, and Rhode Island.

The middle states are, New York, New Jersey, Pennsylvania, Delaware, and the territory on the north-west of the Ohio.

The southern states are, Maryland, Virginia, Kentucky North Carolina, Georgia, and the country south of Kentucky.

The chief cities and towns are, Washington, the capital, Philadelphia, New York, Boston, Baltimore, and Charleston.

These States are, in many respects, in a flourishing and improving condition, and promise to become a powerful and happy community.

They export to Europe, iron, copper ore, timber, pitch, potash, skins, corn, tobacco, rice, cotton, &c.

THE SPANISH DOMINIONS IN NORTH AMERICA.

The least fertile part of these dominions is said to yield two crops of corn in a year; the valleys are extremely rich, and produce spontaneously fruits and vegetables common to the most fruitful parts of the United States.

The Spanish dominions are East and West Florida, New Mexico, and Old Mexico, or New Spain. Mexico is the capital of all Spanish America. Louisiana, which also formed a part of the Spanish dominions, has been lately ceded to the United States for a certain sum of money.

The chief river in Spanish America is Rio Bravo, and the principal lake is Nacaragua.

THE BRITISH POSSESSIONS IN NORTH AMERICA.

This part of North America is mountainous and barren, abounding, however, with lakes, rivers, and bays, that afford plenty of fish. The fur trade and fisheries render these colonies exceedingly valuable.

The British dominions are amazingly extensive, and include Upper and Lower Canada, Nova Scotia, New Brunswick, the Island of Breton, Newfoundland, and the Bermudas, or Somer Islands.

THE NATIVE TRIBES, AND INDEPENDENT COUNTRIES.

These are, Greenland, Labrador, the regions round Hudson's Bay, the nations lately discovered by Sir A. Mackenzie, and those on the western coast.

THE WEST INDIES.

The most important of these islands are Cuba, and Porto Rico, Spanish; Hayti, or St. Domingo, an independent black empire; and Jamaica, English.

North of Hayti and Cuba are the Bahamas, the principal of which is Providence Island.

The Caribbee Islands extend from Tobago in the south to the Virgin Islands in the north. Those belonging to Britain are, Barbadoes, Antigua, St. Christopher's, St. Vincent, Dominica, Grenada, Trinidad, Montserrat, Nevis, the Virgin Isles, Martinique, Guadaloupe, St. Lucie, and Tobago.

The Danes possess St. Croix and St. Thomas. St. Bartholomew belongs to the Swedes, and St. Eustatia to the Dutch.

From these islands are procured sugar, rum, cotton, indigo, spices, cocoa, and coffee.

SOUTH AMERICA.

SOUTH AMERICA is best known for its gold and silver mines, which have been wonderfully productive to Spain. The choicest gums and drugs are likewise found in various parts of the immense continent.

South America comprehends, Terra Firma, Guiana, Amazonia, Peru, Brazil, Paraguay, Chili, and Patagonia. Amazonia and Patagonia are not under the yoke of any European power; they are divided into several kingdoms, each of which has its chief. The inhabitants worship the images of their departed heroes, but have no temples or priests.

South America has no inland sea, but the river Amazons and that of La Plata are celebrated as the largest in the world. They both have their rise among the Andes.

The mountains of South America are the loftiest on the whole face of the globe, and are intermixed with volcanoes of the most sublime and terrific description. The Andes follow the windings of the coast, and extend four thousand six hundred miles. The highest are four miles high, and are covered perpetually with snow.

The Spanish dominions in South America are, Buenos Ayres, Peru, Chili, and New Grenada. Peru and Chili are famous for their gold and silver mines. In Chili it never rains; the sky is seldom cloudy, but the dews of night supply the want of rain.

The Portuguese territory of Brazil is perhaps equal in extent to the Spanish; compensating by its breadth for its deficiency in length.

Guiana belongs partly to the French and partly to the Dutch. Cayenne consists of a considerable territory on the continent, and of an island of the same name.

The southern extremity of South America is Patagonia, a desolate country, inhabited by savage Indians, some of whom are of colossal stature.

The islands contiguous to South America are, Trinidad, the Falkland Islands, Terra del Fuego, Chiloe, and Juan Fernandez.

The Gallipago Islands are near the equator, and the Pearl Islands lie in the Bay of Panama.

GENERAL SUMMARY OF AMERICA

<i>Nations.</i>	<i>Chief Cities.</i>	<i>Religion.</i>	<i>Government.</i>
<i>North America</i>			
United States	Washington	Protestant	0 $\frac{1}{4}$ Republic
Spanish Dominions.	Salvador	Rom. Cath.	Spanish Viceroy
British Possessions	Quebec	Rom. Cath.	Brit. Constitution
<i>South America</i>			
Spanish Dominions	Lima	Rom. Cath.	Spanish Viceroy
Portuguese Dominions	Rio Janeiro	4 Rom. Cath. —	Late King of Port.

PART V.
ASTRONOMY.

ASTRONOMY is the science which explains the forms, numbers, distances, motions, and appearances of the stars, or celestial bodies.

The celestial bodies are, the sun, the planets, with their moons, the comets, and the fixed stars.

The sensible horizon is that apparent circle which on an extensive plane seems to circumscribe our sphere of vision.

The rational horizon divides the heavens into two equal parts, or hemispheres; the visible, which is above, and the invisible, which is below it.

The sun, the moon, the planets, and most of the stars, appear to go continually round the earth from east to west, and to perform each revolution in about 24 hours.

The meridian divides the time of the course of the celestial bodies above the horizon into two equal parts; hence, when the sun is at the meridian, it is mid-day.

On turning our back towards the north, we have the south exactly before us, the east on the left, the west on the right, the zenith over our heads, the nadir under our feet.

The equator, or equinoctial, is that great circle which divides the globe into equal parts.

The same circles, planes, &c. are supposed to exist in the heavens, as well as upon the earth; so that the south and north poles of the earth are said to be situate precisely under those of the heavens.

The whole sphere, which may be better understood by attentively examining the annexed *Plate*, appears to perform its revolution regularly in the space of 23 hours, 56 minutes, and four seconds.

The sun rises and sets every day at different points of the horizon, and crosses the meridian every day at a different point; but never goes farther from the equator than about $23^{\circ} 28'$, either towards the north or towards the south of it.

The ecliptic is the sun's apparent annual path; the angle which it forms with the equator is called the obliquity of

the ecliptic, and the points where it intersects the equator are called the equinoctial points.

The zodiac is a broad portion of the heavens, following the direction of the ecliptic, and extending about eight degrees on each side of it, so as to include the latitude of the planets.

As the sun appears every day in a different point of the ecliptic, it thence seems to revolve in the circle parallel to the equator, but receding from it first about $23^{\circ} 28'$ towards the north, then approaching the equator and again receding from it about $23^{\circ} 28'$ towards the south, and so on.

The tropics are the circles parallel to the equator, which the sun seems to describe when at its greatest distance from the equator; that towards the north being called the tropic of Cancer, and that towards the south the tropic of Capricorn.

THE SOLAR SYSTEM.

THE solar system consists of eleven primary planets, eighteen secondary planets, or moons, and a number of comets.

The names of the primary planets are, Mercury, Venus, the Earth, Mars, Ceres, Pallas, Juno, Vesta, Jupiter, Saturn, and Herschel or the Georgium Sidus.

The Earth has one moon, Jupiter four, Saturn seven, and Herschel six. The other seven planets do not appear to have any moons.

The Sun (*see Plate*) is the centre of the system; nearest to the sun revolves Mercury, then Venus, the Earth, Mars, Ceres, Pallas, Juno, Vesta, Jupiter, Saturn, and Herschel.

All the planets move round the sun from west to east, and in the same direction do the moons move round their primaries, excepting those of Herschel, which moves from east to west. The paths in which the planets move are called their orbits. The orbits of the planets, though circular in the figure, are in nature elliptical. The planets perform their revolutions in different periods of time; the time of performing their revolution is called their year: they turn on their axis, and the time employed for this purpose is called their day. The planets are opaque bodies, and shine only by reflecting the light which they receive from the sun.

Venus and Mercury being nearer the sun than the earth, are called inferior planets; and all the others which are without the earth's orbit, are called superior planets. When

a planet is situate so as to be between the sun and the earth, or so that the sun is between the earth and planet, then the planet is said to be in *conjunction* with the sun; but when the earth is between the sun and any planet, then that planet is said to be in *opposition*. The inferior planets have two conjunctions with the sun, but the superior have only one, because they can never come between the earth and sun. When a planet comes directly between the earth and sun, it appears to pass over the sun's surface, and this is called the transit of the planet. The planets move faster when they are nearest the sun, and slower in the remotest parts of their orbits.

The SUN is a spherical body of immense magnitude, being about a million of times larger than the earth. When viewed through a telescope, several dark spots are seen adhering to its surface. From these spots it is found that the sun turns on its axis in about 25 days. By Dr. Herschel and others it is thought that the sun is a most magnificent habitable globe.

MERCURY is the planet nearest to the sun, and on that account is very seldom visible. It shews phases like the moon, and never appears to us quite full.

VENUS is the brightest, and to appearance the largest of all the planets; it is generally called the morning or evening star, according as it precedes or follows the apparent course of the sun. Venus and Mercury occasionally pass over the sun's surface. These are called the transits of Venus and Mercury. By the transit of Venus the sun's distance from the earth was first accurately ascertained.

The EARTH is not a perfect sphere, but a spheroid, having the diameter at the equator between 30 and 40 miles longer than that at the poles; and being of a globular form, its inhabitants stand upon opposite sides of it, and these are called *antipodes* to each other.

The Earth has a *diurnal* motion about its axis, and an annual one about the sun. The diurnal motion of the earth is the cause of day and night. When one half of the earth is turned towards the sun, it receives his rays, and is illuminated, causing day: and when this half is turned from the sun, we are in darkness, and then we have night.

Twilight is owing to the refraction of the rays of light by our atmosphere, through which they pass, and which, by bending them, occasions some to arrive at a part of the earth, that could not receive any direct rays from the sun.

The axis of the earth, in its journey round the sun, is in

clined to the plane or level of its orbit. This inclination of the earth's axis, in its annual motion round the sun, occasions the diversity of the seasons.

The lengthening and shortening of the days and the different seasons are produced by the motion of the earth in its orbit round the sun. The axis of the earth N S. inclines to the plane of the orbit, and is parallel to itself in all parts of its orbit. In June the north pole N. inclines to the sun, and it is summer to the northern parts of the earth; in December the north pole declines from the sun, and the northern parts have more darkness than light, and then to them the days are short and it is winter. In March and September the axis of the earth is perpendicular to a line drawn through the centre of the sun, and the poles of the earth N S. are in the boundary of light and darkness, and the days and nights are equal all over the earth.

The Moon, next to the sun, is the most remarkable object in the heavens. It is a spherical body, like the earth, round which it revolves, and by the influence of which it is carried round the sun. The average distance of the moon from the earth is 240,000 miles; it turns on its axis in the same time as it performs the revolution round the earth, namely, in about $29\frac{1}{2}$ days, thence the moon has always the same side towards the earth.

The moon's year is of the same length as that of the earth, but the number of their days is very different. To the earth there are $365\frac{1}{4}$ days in a year; to the moon only about $12\frac{1}{2}$.

The moon, at its *conjunction*, is invisible; its first appearance afterwards is called *new moon*. At its *opposition* its whole disk is enlightened, it is then called *full moon*. The earth is a satellite to the moon, and subject to the same changes as that body undergoes. The earth appears more than thirteen times larger than the moon appears to us. At new moon to us the earth appears full to her.

The moon is seen by means of the light from the sun, which is reflected to us. Its changes depend upon its situation relative to the earth and sun.

MARS is not so bright as Venus or Jupiter; its colour is of a dusky red hue.

CERES is a very small planet, situate next to Mars; it was discovered on the first day of the present century by M. Pazzi, an Italian astronomer.

PALLAS is another very small planet, discovered by Dr. Olbers of Bremen, on the 28th of March, 1802.

JUNO was discovered by M. Harding, on the first of September, 1804.

VESTA was first seen by Dr. Olbers on the 29th of March, 1807; it has been seen also by Mr. Groombridge, Mr. Lee, and other astronomers in this country.

JUPITER is the brightest planet next to Venus: when seen by a telescope several belts are observed around its surface parallel to its equator. Jupiter is attended by four moons, which are frequently eclipsed by the shadow of the planet falling upon them. The eclipses of Jupiter's satellites have been very useful in determining the longitudes of places, and the velocity of light.

SATURN can scarcely be seen by the naked eye. It is surrounded by a flat and broad ring that reflects the light. Saturn has seven satellites of different sizes, and its body is surrounded also by belts, like those of Jupiter.

The HERSCHEL or GEORGIUM SIDUS planet can rarely be seen but by means of a telescope. It is attended by six satellites.

COMETS, like the planets, revolve about the sun. They move in eccentric ellipses, and the periods of their revolution are so long, that only three are known with any degree of certainty. Comets are visible to us when they are in that part of their orbit which is nearest to the sun, and then they move so fast as soon to become invisible. When they approach the sun, they often exhibit the appearance of a beard or tail, that reflects the light very brilliantly.

The following table will give the diameters of the Sun and Planets; the mean distances of the Planets from the Sun; and the time occupied in their diurnal and annual revolutions.

	<i>Diameters in English miles.</i>	<i>Distances from the Sun.</i>	<i>Diurnal rotation round their own axis.</i>	<i>Time of revolving round the Sun.</i>
The Sun	813,248	—	25 d. 14 h. 8 m.	—
Mercury	8,324	37,000,000	unknown.	84 d. nearly.
Venus	7,867	68,000,000	23 h. 21 m.	245 d. nearly.
The Earth	7,930	95,000,000	24 h.	365 d. 6 h. 9 m.
Mars	4,189	144,000,000	24 h. 39 m. 22 s.	678 d. nearly.
Ceres	160	260,000,000	unknown.	unknown.
Pallas	80	260,000,000	unknown.	1,703 d. 16 h. 48 m.
Juno*	—	300,000,000	—	2,012 d.
Vesta*	—	—	—	—
Jupiter	89,170	490,000,000	10 h. nearly.	4,332 d. 14 h. 27 m.
Saturn	79,042	910,000,000	10 h. 16 m.	10,759 d. 1 h. 51 m.
Herschel	35,112	1,800,000,000	unknown.	30,737 d. 18 h.

The distances, magnitudes, &c. of Juno and Vesta have not yet been ascertained.

THE FIXED STARS.

The Fixed Stars are so called because they do not change their places with regard to one another, as the planets do. They are commonly classed into seven magnitudes; the largest are called stars of the first magnitude, and the smallest those of the seventh. Although the number of stars appear to us as innumerable, this is a deception, occasioned probably by the refraction and reflection of the rays of light passing from them through our atmosphere. There are seldom more than a thousand stars visible at any one time.

The stars are divided into groups or constellations, called by the names of animals and other objects which they are supposed to resemble, such as the Great Bear, the Eagle, Swan, &c.

The fixed stars, from their immense distance, must shine by their own light, and are probably suns, like our sun, to different systems of planets.

Many of the fixed stars, which to the eye appear as single stars, are found to consist of two. There are also clusters of stars, called *nebulae*; the most remarkable of these is that broad zone called the Milky Way. According to Dr. Herschel, each nebula is composed of a prodigious number of suns, and each sun is destined to give light to a system of worlds that revolve about it.

ECLIPSES.

When any heavenly body is obscured or darkened by the shadow of another falling upon it, or by the interposition of any body, it is said to be eclipsed.

The eclipses of the sun and moon are the most striking, and were formerly regarded as ominous of impending evil.

As the earth is an opaque body, enlightened by the sun, it will cast a shadow towards that side which is farthest from the sun. The moon revolves about the earth near enough to pass through the shadow of the earth.

An eclipse of the moon takes place when the sun, the earth, and the moon are in, or very nearly in, a straight line. An eclipse of the moon can take place only at the time of full moon; and on account of the inclination of the moon's orbit to that of the earth, an eclipse cannot take place every full moon. When the moon passes entirely through the earth's shadow, the eclipse is *total*: when only a part of it passes through the shadow, the eclipse is *partial*.

An eclipse of the sun is occasioned by the moon's coming

directly between the earth and the sun, and thereby obstructing our view of the sun. When the moon happens to be between the sun and earth at the time of new moon, there will be an eclipse of the sun. As the moon is so much smaller than the earth, only a small part of the earth's surface can, at the same time, experience an eclipse of the sun.

• TIDES.

THE ebbing and flowing of the sea is owing to the attraction of the sun and moon, but chiefly to that of the moon. This attraction cannot alter the shape of the solid part of the earth, but it has a great effect on the water, and causes it to assume a spheroidal figure, the longest axis being in the direction of the moon.

It is the highest tide at the place which is perpendicularly under the moon, or where the moon crosses the meridian. The tide is at its greatest height, not when the moon is on the meridian, but some time afterwards, because the force by which the moon raises the tide continues to act for some time after it has passed the meridian.

The oval figure of the waters keeps pace with the moon in its monthly journey round the earth, which, by its daily rotation upon its axis, presents each part of its surface to the action of the moon. There are two tides in every place, in about 25 hours, because the action of the moon produces a tide in the place over which it passes, and also in the opposite surface of the globe at the same time.

When the action of the sun and moon conspire together, as at full and new moon, the tides are highest, and are called *spring* tides. When they counteract each other, as in the quarters, they produce the lowest or *neap* tides.

USE OF THE GLOBES.

THE sciences of GEOGRAPHY and ASTRONOMY are so intimately connected, that it is in vain to expect to acquire a complete knowledge of the one without understanding something of the other. Perhaps the best and most ready method of giving a learner just and accurate notions of these sciences (in which, according to Dr. Watts, "there is not a son or daughter of Adam that has not some concern,") is by the help of globes: since by them the earth and heavens are represented in a natural and striking manner; and by the

various motions and positions of which they are capable, even the youngest pupil is enabled to comprehend the several real and apparent motions of the heavenly bodies ; which to persons unacquainted with these subjects, either pass unnoticed, or are involved in inexplicable difficulties.

THE TERRESTRIAL GLOBE.

The terrestrial globe is a representation of the earth ; having the seas and different countries depicted on it, exactly as they are on the surface of the earth. The spindle on which it turns is called its axis ; but in nature this axis is only imaginary.

The extreme points of the axis are called the poles ; the one is the north or arctic, the other the south or antarctic.

Ancient and modern geographers agree in dividing the earth into FIVE ZONES, namely, one torrid, two temperate, and two frigid zones.

The torrid zone extends from the equator to the tropic of Cancer northward, and to the tropic of Capricorn southward ; including $23\frac{1}{2}$ degrees on each side of the equator, making in the whole forty-seven degrees.

The two temperate zones lie between the tropics and polar circles on each side of the equator, being forty-three degrees each.

The two frigid zones embrace the regions from the polar circles to the poles, extending in each direction $23\frac{1}{2}$ degrees.

The earth is supposed to be surrounded with several imaginary circles, which are actually drawn on the artificial globe, or expressed by wooden or brass work.

The *equator* is a supposed circle of the earth, equidistant from both poles ; and it divides the globe into two equal hemispheres, one north and the other south.

Meridians are imaginary great circles passing from pole to pole, or overhead from north to south.

The *ecliptic* is a great circle in the heavens, in which the sun, or rather the earth, performs its annual revolutions.

The ecliptic is divided into twelve signs, which are marked as follow :

♈ Aries, the Ram ;

♉ Taurus, the Bull ;

♊ Gemini, the Twins ;

♋ Cancer, the Crab ;

♌ Leo, the Lion ;

♍ Virgo, the Virgin ;

♎ Libra, the Balance ;

♏ Scorpio, the Scorpion ;

♐ Sagittarius, the Archer ;

♑ Capricornus, the Goat ;

♒ Aquarius, the Water-bearer ;

♓ Pisces, the Fishes.

These signs refer to stars, among which the sun is seen to pass; and the signs, as well as the ecliptic itself, are drawn on the terrestrial globe only for the convenience of working some problems.

The *tropics* are two circles, each parallel to, and at $23\frac{1}{2}$ degrees distant from the equator.

The *polar circles* are parallel to the tropics, and $23\frac{1}{2}$ degrees distant from the poles.

The *horizon* is expressed by the upper surface of the wooden circle in which the globe stands, and it divides the globe into two equal parts.

The *zenith* of any place is a point in the heavens directly overhead or above that place; and the *nadir* is a point opposite to the zenith.

The wooden horizon of the globe is divided into three parts: the innermost is marked with all the marks on the mariner's compass; the next has the names, characters, and figures, of the twelve signs; and the third is a calendar of months and days. By the two last are instantly seen the sign and degree the sun is in, during every day in the year.

The circumference of the earth and heavens is divided into three hundred and sixty degrees, and every degree is divided into sixty minutes. Half the circumference is one hundred and eighty degrees, and a quarter is ninety degrees.

The latitude of any place is its distance from the equator towards either pole, reckoned in degrees and minutes, and may be ninety degrees north or south.

The longitude of any place is its distance from the meridian of London, reckoned in degrees and minutes at the equator, and it may be one hundred and eighty degrees east or west.

PROBLEM I.

To find the latitude of any place.

Turn the globe, and bring the place to the graduated edge of the brazen meridian; and the degree on the meridian is the latitude north or south, as it may be on the north or south side of the equator.

Thus, the latitude of London is $51\frac{1}{2}^{\circ}$ north: and of St. Helena nearly 16° south.

PROBLEM II.

To find the longitude of any place.

Bring the place to the brazen meridian, and the degree on the equator shews the longitude from London.

Thus, the longitude of Madras is 80° east; of Lisbon 9° west.

PROBLEM III.

The longitude and latitude of any place being given, to find that place.

Look for the longitude on the equator, and bring it to the brazen meridian, then under the given degree of latitude will be the place required.

Thus, the place whose longitude is $80^{\circ} 10'$ east and latitude $31^{\circ} 11'$ north, is Alexandria; and the place which has nearly 6° west longitude, and 16° south latitude, is St. Helena.

PROBLEM IV.

To find the difference of latitude in any two places.

If the places are in the same hemisphere, bring each to the meridian, and *subtract* the latitude of the one from that of the other; if in different hemispheres, *add* the latitude of the one to that of the other.

Thus, the difference of latitude between London and Madras is $38^{\circ} 28'$; between Paris and Cape Horn is $104^{\circ} 49'$.

PROBLEM V.

To find the difference of longitude between any two places.

Bring one of the places to the brazen meridian, and mark its longitude; then bring the other place to the meridian, and the number of degrees between its longitude and the first mark is the difference of longitude.

Thus, the difference of longitude between London and Constantinople is $28^{\circ} 55'$; between Constantinople and Madras is $51^{\circ} 38'$.

PROBLEM VI.

To find the distance of any two places on the globe.

Lay the graduated edge of the quadrant of altitude over both places, and the degrees between them multiplied by $69\frac{1}{2}$ will give the distance in English miles.

Thus, the distance between the Lizard Point and the island of Bermudas is 46° or 3147 miles; between London and Jamaica is 4691 miles.

PROBLEM VII.

The hour of any place being given, to find what hour it is at another place.

Bring the place where the hour is given to the brazen

meridian, and set the index of the hour circle to that hour; then turn the globe till the proposed place comes under the meridian, and the index will point to the present hour at that place.

Thus, when it is twelve o'clock at noon in London it is nearly four in the afternoon at the island of Mauritius; but at Jamaica it is only about seven in the morning*.

PROBLEM VIII.

To rectify the globe for the latitude, zenith, and sun's place.

1. For *the latitude*: elevate the pole above the horizon according to the latitude of the place.

2. For *the zenith*: screw the quadrant of altitude on the meridian at the given degree of latitude, counting from the equator towards the elevated pole.

3. For *the sun's place*: find the sun's place on the horizon, and then bring the same place found on the ecliptic to the meridian, and set the hour index to twelve at noon.

Thus, to rectify for the latitude of London on the 10th of May. The globe must be so placed, that the north pole shall be $51\frac{1}{2}$ degrees above the north side of the horizon: then $51\frac{1}{2}$ will be found on the zenith of the meridian, on which the quadrant must be screwed.—On the horizon the 10th of May answers to the 20th of Taurus: which find on the ecliptic, and bring it to the meridian, and set the index to twelve, and the globe is rectified for the latitude, zenith, and sun's place, for the 10th of May.

PROBLEM IX.

At a given place and hour, to find where the sun is then vertical.

Bring the sun's place found in the ecliptic for that day, to the meridian, which shews its declination; elevate the pole to that declination; then bring the given place to the meridian, and set the index to the given hour. Turn the globe till the index points to twelve at noon; and the place exactly under the sun's declination on the brazen meridian will have the sun vertical at the given time.

Thus, on the 11th of May it will be found that the sun is

* The different manner in which some nations reckon time is as follows:

The Babylonians, Persians, and Syrians, begin their day at sunrising, and count 24 hours. The ancient Jews, Athenians, and Italians, reckon from sun-setting. The Egyptians, like the English, begin at midnight. Astronomers and seamen begin the day at noon, and reckon 24 hours to the next day at noon; and according to this method of reckoning, are all the calculations of the sun, moon, and planets, made in an ephemeris, almanac, &c.

vertical at Port Royal, in Jamaica, when it is a few minutes past five in the afternoon at London.

On the 24th of April, when it is six in the morning at London, the sun will be vertical at Madras.

PROBLEM X.

To find all the places to which a lunar eclipse is visible at any instant.

Find the place to which the sun is vertical at that time, and bring that place to the zenith, and set the index to the upper twelve; then turn the globe till the index points to the lower twelve, and the eclipse is visible to every part of the earth that is now above the horizon.

On the 2nd of October, 1800, there was an eclipse of the moon at night in the evening in London, and the duration was about two hours, which was visible to Europe, Africa, Arabia, Persia, &c.

PROBLEM XI.

To point with the finger to any town or country.

Rectify the globe for the latitude and zenith; and place the globe north and south by the compass, taking care to give the needle a variation of about 23° west; then the finger will easily point out which way every neighbouring city lies.

Thus, standing with my face to the north, I must point to the north-west for Glasgow, and south-east for Alexandria.

PROBLEM XII.

To find the sun's meridian altitude at any given place.

Elevate the globe for the latitude of the place. Find the sun's place in the ecliptic, and bring it to the brazen meridian: count the number of degrees contained on the meridian, between the horizon and the sun's place, which is the altitude required.

Thus, on the 21st of May the sun's meridian altitude at London will be nearly 59° .

PROBLEM XIII.

To find the altitude of the sun at any given place and hour.

Rectify for the latitude, zenith, and sun's place. Turn the globe till the sun's place points to the given hour, and bring the quadrant of altitude to the sun's place at that hour, and

the degrees counted on that from the horizon are the altitude sought.

Thus, the altitude of the sun at London on the 21st of May, at nine in the morning, will be a little more than 43° .

PROBLEM XIV.

To explain the phenomenon of the harvest-moon.

The harvest-moon is the full moon which happens at or near the time of the autumnal equinox; when a few nights before and after the full the moon rises nearly at the same time, on account of the horizon being nearly parallel to that part of her orbit at which she then is*.

Rectify the globe for the latitude; find the moon's place in White's or any other Ephemeris, for four or five days before and after the full moon, and put a patch on each of these places. Bring the sun's place for each day to the brazen meridian, and set the index to twelve at noon: turn the globe westward till the moon's place, corresponding to that day, comes above the horizon, and the index will shew the time of rising.

Thus, the difference of the time of the rising of the moon, two or three days before and after full, in September, 1803, was sixteen minutes only.

THE CELESTIAL GLOBE.

The celestial globe is an artificial representation of the heavens, having the fixed stars drawn upon it in their natural order and situation. The eye is supposed to be placed in the centre.

As the terrestrial globe, by turning on its axis, represents the *real* diurnal motion of the earth, so the celestial globe, by turning on its axis, represents the *apparent* motion of the heavens.

The zodiac is an imaginary belt round the heavens, of about sixteen degrees broad; through the middle of which runs the ecliptic, or the apparent path of the sun.

The twelve signs of the zodiac, which belong to the celestial globe, have been already enumerated.

The first points of Aries and Libra are called the *equinoc-*

* When there is the smallest difference between the times of the moon's rising there will be the greatest difference between the times of her setting, and the contrary.

tial points ; because when the sun appears to be in either of them the day and night are equal.

The first points of Cancer and Capricorn are called *solstitial* points ; because, when the sun is near either of them he seems to stand still, or to be at the same height in the heavens at twelve o'clock at noon, for several days together.

The *latitude* of the heavenly bodies is measured from the ecliptic north and south. The sun, being always in the ecliptic, has no latitude.

The longitude of the heavenly bodies is reckoned on the ecliptic, from the first point of Aries eastward round the globe. The longitude of the sun is what is called, on the terrestrial globe, the sun's place.

PROBLEM I.

To find the latitude and longitude of any star.

Put the centre of the quadrant of altitude on the pole of the ecliptic, and its graduated edge on the star ; then the arch of the quadrant intercepted between the star and the ecliptic shews its latitude : and the degree which the edge of the quadrant cuts on the ecliptic is the degree of its longitude.

Thus, the latitude of Regulus is 28° N. and its longitude nearly 147° . The latitude of Arcturus is 31° N. nearly ; its longitude is about 201° .

PROBLEM II.

To find any place in the heavens by having its latitude and longitude given.

Fix the quadrant of altitude, as in the last problem, letting it cut the longitude given on the ecliptic ; then seek the latitude on the quadrant, and the place under it is the place sought.

Thus, if I am asked what part of the heavens that is whose longitude is $60^{\circ} 30'$, and latitude $5^{\circ} 30'$ south, I find it is the place which Aldebaran occupies.

PROBLEM III.

To find the declination of the sun or stars.

Bring the sun or star to the brazen meridian ; and then its distance in degrees from the equator is its declination.

Thus, the sun's declination, April 19, is $11^{\circ} 19'$ north. On the 1st of December it is $21^{\circ} 54'$ south

PART VI.

NATURAL PHILOSOPHY.

MATTER AND ITS PROPERTIES.

MATTER is the general name of every thing or substance that has length, breadth, and thickness.*

The inherent properties of all matter are, solidity, divisibility, mobility, and inertness.

Solidity is the property which every body possesses of not permitting any other substance to occupy the same place with it at the same time.

If a piece of wood or metal occupy a certain space, before any thing else can take possession of that space the wood or metal must be removed. Water and even air have this property.

If some water be put into a tube closed at one end, and a piece of wood be inserted that fits the inside of the tube very accurately, it will be impossible by any force to get the wooden piston to the bottom of the tube, unless the water is taken away. The experiment may be made with air instead of water.

Therefore water, air, and all other fluids, are in a certain space equally solid with the hardest body.

Divisibility is that property of matter by which its parts may be separated from each other. Of this there can be no end.

Since matter can never be annihilated by division, so we can never imagine it to be cut into such small particles, that any one of them shall not have an upper and an under surface, which may be separated if we have instruments fine enough for the purpose.

It would also be absurd to say, that the greatest mass has more halves, quarters, or thousandth parts, than the smallest particle of matter.

If a grain of gold be melted with a pound or 5760 grains of silver, and a single grain of the mass be dissolved in diluted nitric acid, the gold, which is only the 5761st part of a grain, will fall to the bottom and be visible.

A grain of gold may be hammered by the gold-beaters to such a degree of fineness, that the two millionth part of the grain can be seen by the naked eye.

In addition to these experiments we may observe, that there are animalculæ so small, that many thousands of them taken together are smaller than the point of a needle.

The particles of light are still more minute than these, or we dare not open our eyes.

From all which it is evident, that matter is actually divisible to a degree much greater than we can imagine ; and to which we can set no limits.

Mobility is that property of matter by which it is capable of being removed from one part of space to another.

It is found from experiment and observation, that all matter is capable of being moved if a sufficient force can be applied for the purpose.

Inertness, or inactivity, is that property of matter by which it would always continue in the same state of rest or motion in which it is put, unless prevented by some external force.

It is evident that matter, as a stone, can never put itself in motion.

Bodies in motion, as a bowl on the ground, or a cannon ball passing through the air, fall from motion to a state of rest, either by the friction of the earth, by the gravity or weight of the body, or by the resistance of the air.

A marble shot from the fingers would run but a small distance on a carpet ; its motion would be continued much longer on a flat pavement ; and longer still on fine smooth ice. Here the friction is greatest on the carpet, and least on the ice. If the friction were quite removed, and the resistance of the air also, the marble once put in motion would continue in that state for ever.

If a ball were fired from a canon with a certain velocity, and there were no resistance from the air, it would circulate round the earth perpetually, and never come to a state of rest. In this manner the moon goes round the earth, although she is as inactive as a stone.

If a person were standing in a boat at rest, and the boat

be suddenly pushed from the shore, he will be in danger of falling backwards. And if the boat in swift motion be stopped before he is aware, he will fall forwards, because his tendency will then be to continue in the same state of motion. This principle is applicable to the motion on horses or in carriages.

•ATTRACTION AND REPULSION.

BY ATTRACTION is meant the tendency that bodies have to approach each other.

There are five kinds of attraction; namely, the _____ on of cohesion, of gravitation, of electricity, of magnetism, and chemical attractions.

The attraction of cohesion is that by which the small particles of matter are kept together. By this principle bodies preserve their forms, and are prevented from falling to pieces.

The attraction of cohesion takes place between bodies only when they are at very small distances from each other.

If two leaden bullets be scraped very clean and squeezed together, they will adhere so firmly as to require a considerable force to separate them.

If two globules of quicksilver be placed near each other they will run together, and become one large drop.

Capillary attraction is reckoned a species of cohesion.

If a small glass tube, open at both ends, be dipped in water, the water will rise up in the tube higher than its level in the basin. The smaller the bore of the tube, the higher will the water rise.

Take two pieces of glass, five or six inches square, join any two of their sides, and separate the opposite sides with a small piece of stick, so that the surfaces may form a small angle; then immerse them about an inch deep in a basin of coloured water, and the water will rise between the glasses, and form a beautiful curve.

A piece of sugar, or sponge, will draw up water or any other fluid upon the same principle.

It is probably owing to the various degrees of cohesion that some bodies are hard and others soft; that some are in a solid, others in a fluid state.

REPULSION is a force that is supposed to extend to a small distance round bodies, and prevent them from coming

into actual contact. Where the sphere of attraction ends a repulsive force begins.

The repelling force of the particles of a fluid is but small, and therefore if a fluid be divided it readily unites again. But if a hard substance, as glass or sealing-wax, be broken, the parts cannot be made to adhere, unless they are moistened in one instance, or melted in the other.

Water repels most bodies till they are wet. A small sewing needle will swim on a basin of water.

Drops of water will roll on the leaves of many vegetables without wetting them.

If a ball of light wood be dipped in oil, and put into a pan of water, the water will be repelled from the wood and will form a channel round it.

The attraction of gravitation, or gravity, is that force by which distant bodies tend toward one another. By gravity a stone dropped from a height falls to the surface of the earth; and by it the heavenly bodies are retained in their orbits. The planets gravitate towards the sun, and towards each other, as well as the sun towards them.

By gravity all terrestrial bodies tend towards the centre of the earth. In all places equally distant from the centre of the earth the force of gravity is equal.

The force of gravity is less at the equator than it is at the poles, because the equatorial diameter is thirty-four miles longer than the polar diameter.

The force of gravity is greatest at the earth's surface, from whence it decreases upwards and downwards. It decreases upwards as the square of the distance from the centre, and downwards simply as the distance.

At *double* the distance from the centre *above* the surface the force of gravity would be only one-fourth of what it is at the surface, and at three times the distance the force would be only one-ninth. At the distance of half a semi-diameter from the *centre*, the force would be only one-half what it is at the surface: at one-third of the semi-diameter, the force would be one-third, and so on.

MOTION.

MOTION is a continued and successive change of place. Nothing can be produced or destroyed without motion, and

every thing that happens depends upon it. We are chiefly concerned with two kinds of motion; that by which an entire body is transferred from one place to another, and the motion of the parts of bodies among themselves.

By the first kind of motion, a heavy body falls to the surface of the earth, a carriage moves, and a ship sails. It is by the second that plants and animals grow, and the compositions and decompositions of bodies take place.

Take a decanter of clear water, and hold it in the rays of the sun, and you will see the light particles contained in it are in perpetual motion.

Let the rays of the sun pass through a small hole in a window shutter, and you will observe the particles floating in the atmosphere are in constant motion, of whose existence you were not before aware.

There are several things to be noticed with regard to motion:—1. The force which impresses the motion.—2. The quantity of matter in the moving body.—3. The velocity and direction of motion.—4. The space passed over by the moving body.—5. The time employed in going over this space.—And, 6. The force with which it strikes another body that is opposed to it.

Every body, by its inertness, resists all change of state; therefore to put a body in motion there must be sufficient cause.

The causes of motion are called motive powers: these are the action of men and other animals, wind, water, gravity, the pressure of the atmosphere, and steam.

The velocity of motion is estimated by the time employed in moving over a certain space, or by the space passed over in a certain time. The less the time, and the greater the space moved over, the greater is the velocity. To ascertain the degrees of velocity, the space run over must be divided by the time.

If a ship sail at the rate of twelve miles in an hour, or sixty minutes, then the velocity is equal to one mile in five minutes.

If two persons set out together on a journey, and one walk two miles and a half, and the other walk five miles an hour, the velocity of the latter will be double that of the former.

To measure the space run over, the velocity must be multiplied by the time. It is evident, that if either the velocity or the time be increased, the space run over will likewise be increased. If the velocity be doubled, then the body will

move over twice the space in the same time; if the time be twice as great, then the space will be doubled; but if the velocity and time be both doubled, then will the space be four times as great.

A body in motion must every instant tend to some particular point. It may tend always to the same point, in which case the motion will be in a straight line. It may be continually changing the point to which its motion is directed, and this will produce a curvilinear motion. If a body is acted upon only by one force, or by several forces in the same direction, its motion will be in the same direction in which the moving force acts. The motion of a boat which a man at a given place draws to him with a rope is of this kind.

If two or more forces, differently directed, act upon the same body at the same time, as it cannot obey them all, it will move in a direction somewhere between them. This is called the composition and resolution of motion. There are many instances in nature of motion produced by several powers acting at the same time. A ship driven by the wind and tide is one: so also is a paper kite acted upon by the wind in one direction and by the string in another.

A ball fired from a cannon is acted upon by two forces, the one is that occasioned by the powder, the other is the force of gravity.

Accelerated motion is that in which the velocity is continually increasing.

Uniformly accelerated motion is that in which the velocity increases equally in equal times.

The increasing velocity with which a body falls to the earth is an instance of accelerated motion, which is caused by the constant action of gravity.

The cannon ball is acted on by a single impulse of the powder, and the accelerating force of gravity; it therefore describes a curve. This is the foundation of the art of gunnery.

Motion is said to be *retarded*, if its velocity continually decrease; and to be *uniformly retarded*, if its velocity decrease equally in equal times.

The velocities of falling bodies are in proportion to the spaces run over.

The velocities, and also the space passed over by falling bodies, in each instant, increase as the odd numbers 1, 3, 5, 7, 9, &c.

It is found by experiment, that a body falling from a height moves at the rate of about 16 feet in the first second of time, in the next 48, in the third 80, in the fourth 112 feet, and so on.

The force, with which a body moves, or which it would exert upon another body opposed to it, is always in proportion to the velocity multiplied by its weight. This force is called the *momentum* of the body. If two equal bodies move with different velocities, their forces or momenta are in proportion to their velocities.

If two equal cannon balls be projected by different quantities of powder, so that the velocity of the one is double that of the other, then the force or momentum of the former will be double that of the other.

If two stones, one of two pounds and the other of six pounds, be hurled with equal velocities, the force or momentum of the latter will be three times greater than that of the former.

In all cases the momenta of bodies must be as the quantities of matter multiplied into the velocities.

CENTRAL FORCES, AND THE CENTRE OF GRAVITY.

All motion produced upon a body by one force only must be in a right line. Therefore a body moving in a curvilinear direction must be acted upon by two forces at least; and when one of these ceases to act the body will move again in a straight line.

A stone in a sling is moved round by the hand, while it is pulled towards the centre of the circle which it describes by the string: but when the string is let loose the stone flies off in a tangent to the circle.

Every body moved in a circle tends to fly off from the centre: this is called the *centrifugal* force.

That force by which bodies are drawn towards a centre, and which makes them revolve in a circle, is called the *centripetal* force.

The centrifugal and centripetal forces are denominated *central* forces.

The *centre of gravity* of a body is that point about which

all its parts do in any situation exactly balance each other. If a body be suspended or supported by the centre of gravity it will rest in any position into which it is put.

Whatever supports the centre of gravity bears the weight of the whole body, therefore the whole weight of a body may be considered as centred in this point. The common centre of gravity of two or more bodies is the point upon which they would rest in any position.

If a line be drawn from the centre of gravity of a body perpendicular to the horizon it is called the *line of direction*, because it is the line that the centre of gravity would describe if the body were suffered to fall.

While the line of direction falls within the base upon which the body stands the body cannot fall ; but if it fall without the base the body will tumble.

The broader the base, and the nearer the line of direction is to the centre of it, the more firmly does a body stand. The narrower the base of a body, and the nearer the line of direction is to the side of it, the more easily is it overthrown. Hence a sphere is easily rolled upon a horizontal plane ; and a narrow pointed body is with difficulty made to stand.

If a plane be inclined on which a heavy body is placed, the body will slide down upon the plane while the line of direction falls within the base ; but it will slip or roll down when that line falls without the base.

When the line of direction falls within the base of our feet we stand, and most firmly when it is in the middle ; but when it is out of the base we fall.

Rope-dancers are able to perform their feats by knowing how exactly to keep the common centre of gravity of themselves and their pole just within the base.

We apply this principle in the common actions of life ; thus we bend our body forward when we rise from a chair, or go up stairs :—a man leans forward when he carries a burden on his back ; and to the right or left as he carries it on the opposite side.

THE MECHANICAL POWERS.

The mechanical powers are simple engines, that enable men to raise heavy weights, move heavy bodies, and overcome resistances, which they could not do with their natural strength alone. Every machine is composed of one or more of the mechanical powers.

Three things are always to be considered in treating of mechanical engines: 1. The *weight* to be raised; 2. The *power* by which it is to be raised; and, 3. The *instrument* by which this is to be effected.

There are six mechanical powers; namely, the *lever*, the *pulley*, the *wheel* and *axis*, the *inclined plane*, the *wedge*, and the *screw*.

The power of a machine is calculated when it is in a state of equilibrium; that is, when the *power* just balances the *resistance* of the weight.

THE LEVER.

The *lever* is a bar of iron or wood, supported on and moveable round a prop called a fulcrum.

There are three kinds of levers, distinguished according to the different situations of the fulcrum and the power with respect to each other.

In all kinds of levers the power is to the weight as the distance of the weight from the fulcrum is to that of the power from the fulcrum.

The lever of the first kind is when the fulcrum is placed between the weight and the moving power.

A *balance* is a lever of the first kind with equal arms. The *steelyard* is also the first kind of lever with a moveable weight. A poker in the act of stirring the fire is a lever of this kind: the bar of the grate upon which it rests is the fulcrum, the coals the weight to be overcome, and the hand is the power.

To this kind of lever may be referred scissars, pincers, snuffers, &c. which are made of two levers, acting contrary to each other. The fulcrum, in these cases, being the pin which keeps them together.

The lever of the first kind is chiefly used for loosening large stones; or to raise great weights to small heights, in order to get ropes under them.

The second kind of lever is when the fulcrum is at one end, the power at the other, and the weight between them; the advantage gained by this lever is as great as the distance of the power from the fulcrum exceeds the distance of the weight from it.

This kind of lever shews the reason why two men carrying a burden, as a cask upon a pole, may bear unequal shares, according to their strength, by placing it nearer to the one than the other.

This is applicable to the case of two horses of unequal strength, where the beam may be so divided that the horses shall draw in proportion to their respective ability.

To this kind of lever may be referred oars, rudders of ships, doors turning on hinges, cutting knives which are fixed at one end.

A lever of the third kind is when the prop is at one end and the weight at the other, and the power applied between them. Here the power must exceed the weight, in the same proportion as the distance of the weight from the prop exceeds the distance of the power.

A ladder which is to be raised by the strength of a man's arms, represents a lever of this kind, where the fulcrum is that end which is fixed against the wall, or upon which another man stands; the weight may be considered as at the top part of the ladder, and the power is the strength applied to the rearing of it.

The wheels in clock and watch work may be reckoned levers of this kind, because the power that moves them acts near the *centre* of motion by a pinion, and the resistance it has to overcome acts against the teeth at the *circumference*.

The bones of a man's arm, and the greatest number of the moveable bones of animals, are levers of the third kind. Hence in natural levers the power is disadvantageously situate, owing to the power being so near the centre of motion, but the loss of power is compensated by the beauty and compactness of the limb.

THE WHEEL AND AXIS.

The wheel and axis, though made in many forms, consists of a cylinder, and a wheel fastened to it; or of a cylinder, with projecting spokes, that answer the same purpose as a wheel. The advantage gained is in proportion as the circumference of the wheel is greater than that of the axis; or as the diameter of the wheel is greater than the diameter of the axis.

In this case, as in the lever, the power will travel over six times as much space as the weight, when the machine is put in motion. To this engine, cranes of all kinds for raising heavy weights may be referred.

Sometimes the axis is turned by a winch fastened to it, which serves for a wheel, and the power gained is in proportion as the winch is larger than the axis.

A capstan is a cylinder of wood, with holes in it: into these bars are put to turn it round. Bars are made to act something like the spokes of a wheel.

THE PULLEY.

The pulley is a small wheel turning on an axis with a rope passing over it.

The small wheel is called a sheeve, and is so fixed to a block, as to be moveable round a pin passing through the centre.

Pulleys are either *fixed* or *moveable*.

The fixed pulley gives no mechanical advantage, but is used only to change the direction of the power. By it a man may raise a weight to any height, without moving from the place in which he is, as a stone to the top of a building, otherwise he must ascend with the weight.

The moveable pulley is fixed to the weight, and rises and falls with it, and the advantage gained by it is as two to one; that is, a power of 10lbs. will balance a weight of 20lbs.

THE INCLINED PLANE.

This mechanical power is merely a plane surface inclined to the horizon, and is used to raise weights from one level to another. It is often made by placing boards or earth in a sloping direction, and is of great importance in rolling up heavy bodies, as casks, wheel-barrows heavy laden, &c.

To the inclined plane may be reduced hatchets, chisels, and other edged tools, which are sloped only on one side.

THE WEDGE.

The wedge may be considered as two equally inclined planes united at their bases. The advantage gained is in proportion as the length of the two sides of the wedge is greater than the back, or as the length of one side is greater than half the back.

When the wood cleaves at a distance before the wedge, the advantage gained is in proportion as one side of the cleft is greater than half the length of the back.

The wedge is a very important mechanical power, used to split rocks, &c. which could not be effected by any of the other mechanical powers.

All instruments, as many sorts of chisels, that are chamfered on both sides, are to be referred to the principle of the wedge.

THE SCREW

The screw is never used without the application of a lever

or winch to assist in turning it, and then it becomes a compound engine of very great force, either in pressing bodies close together, or in raising great weights.

The screw may be conceived to be made by cutting a piece of paper into the form of an inclined plane, and then wrapping it round a cylinder. The edge of the paper will form a spiral line round the cylinder, which will answer to the thread of the screw.

The advantage gained by this mechanical power is in proportion as the circumference of the circle, made by the lever or winch, is greater than the thread's distance of the screw.

It is evident that the winch or lever must turn the cylinder once round, before the weight or the resistance can be moved from one spiral winding to another.

THE MOVING POWERS.

The principal moving powers are, the strength of animals, the force of running water, and of wind, the force of steam, &c.

The steam of boiling water is a most powerful agent, and recent improvements have extended the application of it from the smallest to the most powerful engines.

The force of running water, and that of wind, are very advantageous movers of many engines, such as pumps, mills, &c. Running water is preferable to wind, as a mover of machines, on account of its uniformity.

As to the natural strength of living animals, it may be remarked that a man of ordinary strength is reckoned capable of doing about one-fifth part as much work as a horse.

HYDROSTATICS,

OR THE LAWS OF FLUIDS.

A FLUID, is a body the parts of which yield to any impression; and are easily moved among each other.

Fluids are either non-elastic and incompressible, as water, oil, mercury, &c. ; or elastic and compressible, as air, and the different gases.

The science of hydrostatics treats of the mechanical properties of non-elastic fluids, particularly of water.

Fluids are subject to the same laws of gravity with solids, but their want of cohesion occasions some peculiarities.

The parts of the solid are so connected as to form a whole, and their effort is concentrated in a single point called the centre of gravity: but the parts of a fluid gravitate independently of each other.

Fluids press not only like solids, perpendicularly, but also upwards, sideways, and in every direction equally.

Take a glass tube open at both ends, put a cork in one end, and immerse the other in water. The fluid will not rise far in the tube, but the moment the cork is taken out it will rise to a level with the surrounding water, which shews the pressure upwards.

A fluid kept in an open vessel will assume a flat surface parallel to the horizon, and will remain at rest.

If a vessel consist of pipes variously inclined, communicating with each other, and open at the top; water poured into any one of them will rise to the same level in all.

The pressure of the same fluid is in proportion to the perpendicular height, and is exerted in every direction, so that all the parts, at the same depth, press each other with equal force in every direction.

If a bladder full of air be immersed in water, then the perpendicular pressure is manifest, for the deeper the bladder is immersed, the more will its bulk be contracted.

An empty bottle being corked, and by means of a weight let down a certain depth into the sea, it will be broken, or the cork will be driven into it by the perpendicular pressure. But a bottle filled with water, wine, &c. may be let down to any depth, without damage, because in this case the internal pressure is equal to the external.

It is evident that the quantities of water in several pipes, in which there is a communication, whatever be their size, press equally against each other; for if the water be suddenly taken out of one of the pipes, the surface of the water will instantly descend to a lower level in all the other pipes.

The horizontal bottom of a vessel sustains the pressure of a column of the fluid, the base of which is the bottom of the vessel, and the perpendicular height is equal to the depth of the fluid.

The pressure of a fluid upon any given part of the bottom or sides of a vessel, is equal to the weight of a column of that fluid, having a base equal to that part of the bottom or side, and an altitude equal to the perpendicular height of the fluid

above it. Hence may be calculated the pressure upon, and the strength required for dams, cisterns, pipes, &c.

By the *specific gravities* of bodies is meant the relative weights which equal bulks of different bodies have to each other. It is usual to compare the weight of bodies with that of water, as it is by weighing them in water that their specific gravities are found.

The specific gravities of all bodies that sink in water may be found, first, by weighing the body in air, then in water, and dividing the weight in air by the loss in water.

A guinea weighs 129 grains in air, by being weighed in water it loses $7\frac{1}{4}$ grains, which shews that a quantity of water of equal bulk with the guinea weighs $7\frac{1}{4}$ grains : divide 129 by $7\frac{1}{4}$ or 7.25, and the quotient will be 17.793, which proves the guinea to be 17.793 times heavier than its bulk of water.

HYDRAULICS.

THE science of HYDRAULICS teaches how to estimate the swiftness and force of fluids in motion. Upon the principles of this science machines worked by water are constructed—engines, mills, pumps, and fountains, are the result of our knowledge of hydraulics.

Fluids may be conveyed over hills and valleys, in bended pipes, to any height not greater than the level of the spring from whence they flow. Upon this principle fountains are formed ; for if near the bottom of any vessel a small pipe bending upwards be fastened, the water will spout out through the pipe, and rise nearly as high as the surface of the water in the vessel.

The *common pump*, improperly called the sucking pump, consists of a pipe open at both ends, in which is a moveable piston that fits the bore exactly.

The *forcing pump* consists of a barrel, a plunger, and two fixed valves, that should be air-tight, and so disposed as to let the water freely rise, but absolutely to hinder its return.

The water in a sucking pump is raised from the well by the pressure of the atmosphere ; and it can be raised only about thirty-three feet, because the weight of a column of the whole atmosphere is equal only to an equal column of water thirty-three feet high.

The forcing pump is unlimited in regard to the height to

which it can raise water. The air vessel is added to the forcing pump, to give the water a more equable stream. A constant stream may be produced by two barrels, with pistons moving up and down alternately.

PNEUMATICS.

THE science of PNEUMATICS treats of the mechanical properties of elastic or æriform fluids, such as their weight, density, compressibility, and elasticity.

The air in which we live surrounds the earth, and extends to a considerable height above it, and, together with the clouds and vapours that float in it, is called the atmosphere. The air is not visible, because it is perfectly transparent.

The existence of the air may be ascertained by swinging the hand edge-ways swiftly up and down, which gives the idea of separating the parts of some resisting medium.

Any swift motion, as of a stick or whip, or that of a fan, proves the existence of air as a resisting medium.

The air being a heavy body, presses like other fluids, in every direction, upon whatever is immersed in it, and in proportion to the depth.

It is known that the pressure of the atmosphere is less upon a high mountain than in the plain or valley beneath. The pressure of the air may be thus shewn: Cover a wine glass completely filled with water, or wine, with a piece of writing paper; then place the palm of the hand over the paper, so as to hold it tight and accurately even. The glass may then be turned upside down, and the hand removed, without the water running out. The pressure of the air upon the paper sustains the weight of water.

The air can be compressed into a much less space than it naturally occupies.

Take a glass tube open only at one end; it is of course full of air: plunge the open end into a bowl of water, and you will see the water rise an inch or so in the tube, the air therefore, which before filled the whole length of the tube, is compressed into a smaller space.

Air pumps are machines for exhausting the air from certain vessels adapted to the purpose.

Fig. 1 in the plate represents one of the most convenient

air pumps. A A are two brass barrels, each containing a piston, with a valve opening upwards. The pistons are worked by means of the winch B, which moves them up and down alternately. On the wooden frame D E, there is a brass plate G, ground perfectly flat and even, and also a brass tube communicating with the two cylinders and the cock I, and opening into the centre of the brass plate at *a*. K, the glass receiver to be exhausted of air is made to fit very accurately on the brass plate. Having shut the cock I, the pistons are worked up and down, and the air is suffered to escape when the piston is forced down, because the valve opens upwards, but it is prevented from returning into the valves for the same reason. The air is gradually exhausted from the receiver, which will become immoveable fixed. Upon opening the cock I, the air rushes violently, and with a noise, into the receiver.

Air is about 900 times lighter than water. A quart of air may be weighed in a Florence flask to which a little apparatus is added, and it is found to weigh 16 grains, but a quart of water weighs 14621 grains; the latter number being divided by the former gives 914, so that the air is 914 times lighter than water. The weight of the air is variable.

When the surface of a fluid, as water, quicksilver, &c. is exposed to the air, it is pressed by the atmosphere equally on every part, and is at rest. If the pressure be removed from any part, the fluid in that part must yield, and be forced out of its situation.

The following experiments shew what the pressure of the air amounts to :

Experiment 1. Into the receiver A, fig. 2, put a small vessel of quicksilver *x*, and through the collar of leather, as at B, suspend a glass tube, closed at the upper end, over the quicksilver. The apparatus thus situate is to be placed on the brass plate of the air pump, and the air completely exhausted from the receiver; the tube is then to be let down into the quicksilver, which will not rise in it as long as the receiver continues empty; but as soon as the air is re-admitted, all the surface of the quicksilver is pressed upon by the air, except that portion which lies above the orifice of the tube: it will therefore rise in the tube, until the weight of the elevated quicksilver presses as forcibly on that part of it which lies beneath the tube, as the weight of the air does on every other equal portion without the tube.

2. Take a syringe or common water squirt, and having pushed the piston to the farthest end, immerse it in water.

then draw up the piston and the water will follow : for when the piston is raised, the air is drawn out of the syringe, and the pressure of the atmosphere is removed from the part of the water immediately under it, consequently the water yields in that part to the pressure on the surface.

3. Upon this principle *sucking pumps*, as they are called act : the piston accurately fitting the inside of the barrel, by being raised, removes the pressure of the atmosphere from that part, and consequently the water is forced up by the pressure upon the surface.

The pressure of the atmosphere is capable of supporting about 33 feet of water, or about 29 or 30 inches of quicksilver. If a glass tube upwards of 31 inches long be filled with quicksilver and have its aperture immersed in a bason of the same fluid, the altitude of the mercury in it will be found to vary both at different times and in different places. Hence it appears that the weight of the atmosphere is variable, and the above-mentioned tube filled with quicksilver has, from its shewing the actual weight of the atmosphere, being called a *barometer*.

The most usual altitude of the barometer, in London, is between 28 and 31 inches, but it is seldom to be seen below $28\frac{1}{2}$, or above $30\frac{1}{4}$ inches. In calm weather, when the air is inclined to rain, the mercury is commonly low. In serene settled weather the mercury is generally high. During very great winds, though unaccompanied with rain, the mercury sinks lowest of all with relation to the point of the compass from which the wind blows. By removing the pressure from air it always expands, nor is it known to what degree this expansion will reach.

By increasing the pressure upon air it may be condensed into any given space, however small, nor has this condensation any known limits. The density of the air is in proportion to the force that compresses it.

The bent tube A B C D, fig. 3, is open at both ends ; pour mercury in so as to rise in both sides of the tube to C, and B : the part from C D is full of air at the common density : stop up D so as to make it air-tight, and pour mercury into A, so that the column of mercury A B shall be equal in length to the height at which it stands in the barometer at the time. The air in the shorter leg will now be compressed by the weight of the atmosphere, and also with an additional equal weight of a column of mercury ; and the mercury in the shorter leg will be risen to E, and D E is only the half of D C : that is, the pressure of a double atmosphere c ompresses

the air to half the space which it naturally occupies. If another equal column of mercury were added to the length A B, the air in D C would be reduced into one-fourth the space that it formerly occupied.

As all the parts of the atmosphere press upon each other, the air near the surface of the earth is denser than that which is at some height above it. The height to which the atmosphere extends has never been exactly ascertained ; but at a greater height than 45 miles it will not refract the rays of light from the sun.

ACOUSTICS.

Acoustics is the science which treats of sounds in general, Diacoustics of refracted sound, and Catacoustics of reflected sound.

A sonorous body, whilst sounding, is unquestionably in a state of vibration, and the air, by similar vibrations, communicates and propagates these vibrations.

There are three principal causes of the variety of sounds : first, the greater or less frequency of the vibration of sonorous bodies ; secondly, the quantity or force of the vibrating particles ; and, thirdly, the greater or less simplicity of the sounds. Hence are derived the height, strength, and quality of sounds.

The vibrations of a sounding body continue for a longer or shorter time, according as the body is more or less elastic, or as it is thicker or thinner.

The vibrations of a musical string are also communicated to other parts of it, which, at first sight, might be supposed to be at rest.

In general, sound travels through the atmospheric air at the rate of 1142 feet per second, or one mile in less than five seconds.

The knowledge of the velocity of sound may be applied to the measurement of distances, when no better method can conveniently be used.

OPTICS.

LIGHT consists of an inconceivably great number of particles flowing from a luminous body in all manner of direc-

tions. By a *ray* of light is meant the motion of a single particle.

The light of a candle, if there be nothing to obstruct the passage, will fill the whole space within a mile of the candle every way with luminous particles, before it has lost the least sensible part of its substance.

Light travels from the sun to the earth in about eight minutes, that is at the rate of nearly two hundred thousand miles in a second of time.

The particles of light must be incomprehensibly small, for its rays cross each other in all possible directions without the least disturbance.

Take a piece of brown paper and make a pin-hole in it, through this small aperture a great variety of objects may be seen, as trees, houses, &c. The light proceeding from all these objects must pass at the same instant through the hole, and cross each other before they reach the eye, yet the clearness of vision is not disturbed by it.

The rays of light move always in straight lines, therefore no object can be seen through the bore of a bended pipe.

Parallel rays are such as move always at the same distance from each other.

If rays continually recede from each other, they are said to *diverge*. If they continually approach each other, they are said to *converge*. The point at which converging rays meet is called the *focus*. The point towards which they tend, but which they are prevented from reaching by some obstacle, is called the *imaginary focus*.

While the rays of light continue in any medium of an uniform density, they are straight; but if they pass from one medium to another in a *perpendicular* direction, they proceed through this medium in the same direction as before.

• • • REFRACTION.

When rays of light pass *obliquely* out of one medium into another, which is either more dense or more rare, they are bent out of their former course, and they are then said to be *refracted*.

Rays of light are always refracted *towards* a perpendicular in a *denser* medium, and this refraction is more or less, in proportion as the rays of light fall more or less *obliquely* on the refracting surface.

When light passes out of a denser into a *rarer* medium, it moves in a direction *farther* from the perpendicular.

Take a glass goblet half full of water, and put a *shilling*

into it, then put a saucer or plate upon it, and holding it tight on, turn plate and glass together: a by-stander, unacquainted with the laws of refraction, will suppose that he sees a shilling and half crown: the one is seen by refraction through the water, the other by the rays after refraction at the surface.

A *lens* is a glass ground into such a form as to collect or disperse the rays of light which pass through it. There are various kinds of lenses, named according to their forms. A *planoconvex* lens has one side flat, and the other convex. A *planoconcave* is flat on one side, and concave on the other. A *double convex* is convex on both sides. A *double concave* is concave on both sides. A *meniscus* is convex on one side and concave on the other.

The *axis* of a lens is a line passing through the centre.

If parallel rays falls upon a planoconvex lens, they will be so refracted as to unite in a point behind, called the principal focus, or focus of parallel rays.

The distance from the middle of the glass to the focus is called the *focal* distance.

All the rays of the sun which pass through a convex glass are collected in its focus.

The force of the heat at the focus is to the common heat of the sun, as the area of the glass is to the area of the focus.

If a lens four inches in diameter collect the sun's rays into a focus at the distance of twelve inches, the image will not be more than one-tenth of an inch in diameter: the surface of this little circle is 1600 times less than the surface of the lens, and consequently the heat will be 1600 times greater at the focus than at the lens. Hence the construction of common burning-glasses, which are all double convex lenses. Hence the reason why furniture has been set on fire by leaving a globular decanter of water incautiously exposed to the rays of the sun, which acts as a double convex lens.

REFLECTION.

When rays of light strike against a surface, and are sent back from it, they are said to be *reflected*. The ray that comes from any luminous body, and falls upon a reflecting surface, is called the *incident ray*.

The *angle of incidence* is that which is contained between the incident ray, and a perpendicular to the reflecting surface in the point of reflection.

The *angle of reflection* is that contained between the perpendicular and the reflected ray.

The *angle of refraction* is that contained between the refracted ray and the perpendicular.

A *mirror* or *speculum* is an opaque body, whose surface is finely polished, so that it will reflect the rays of light which fall upon it, and thus represent the images of objects.

Mirrors are made of metal, or glass polished on one side and silvered on the other. There are three kinds of mirrors, namely, the *plane*, the *convex*, and the *concave*. Common looking-glasses are called plane mirrors; but the concave and convex are denominated mirrors.

When a ray of light is reflected from any surface, the angle of reflection is equal to the angle of incidence.

When parallel rays fall upon a concave mirror, they will be reflected and meet in a point, at half the distance of the surface of the mirror from the centre of its concavity.

The rays of light that proceed from any celestial object may be esteemed parallel to the earth, therefore the image of that object will be found half way between the mirror and its centre of concavity.

The rays which proceed from any remote terrestrial object will be converged at a little greater distance than half way between the mirror and the centre of concavity, and the image will be inverted with respect to the object.

When the object is more remote than the centre of concavity, the image is less than the object, and is between the object and the mirror.

When the object is nearer than the centre of concavity, the image will be more remote and larger than the object.

If the object be in the centre of the mirror's concavity, the image and object will be equal and coincide.

If I stand before a large concave mirror, beyond its centre of concavity, I shall see an inverted image of myself in the air. And if I hold out my hand towards the mirror, the hand of the image will come out and coincide with it, as if the two were shaking hands. If I reach my hand farther, the hand of the image will pass by it, and if I move my hand to one side, the hand of the image will move to the other. A by-stander will see nothing of the image, because none of the reflected rays can enter his eyes.

THE DIFFERENT REFRACTIBILITY OF THE RAYS OF LIGHT.

Light is not a simple homogeneous body, but compounded

of seven different species, each of which, in passing from one medium to another, suffers a different degree of refrangibility.

To examine the different colours of a ray of light, a small hole must be made in the shutter of a dark room, and the ray must fall upon a prism in an oblique direction.

If the whole spectrum be divided into 369 parts, the *red* will occupy 45 of them, the *orange* 27, the *yellow* 48, the *green* and the *blue* 60 each, the *indigo* 40, and the *violet* 80.

By mixing the seven primitive colours in these proportions, a dusky white is obtained.

Paint on a circular board the seven colours in their proper proportions, and then whirl the board with great velocity, it will appear of a dirtyish white. If the colours were more perfect and accurately defined, the white would be more perfect also.

The seven colours are reducible to three, namely, the red, the blue, and the yellow. The most remarkable instance of the separation of the primary colours of light is that of the rainbow.

The rainbow is formed by the reflection and refraction of the rays of the sun's light from the drops of falling rain.

The colours of the rainbow are frequently visible among the waves of the sea, the tops of which are blown by the wind into small drops; they are sometimes seen on the ground, when the sun shines, on a thick dew.

Cascades and fountains frequently exhibit the appearance of rainbows; and water blown violently from the mouth of an observer, whose back is turned to the sun, will produce the same phenomenon.

THE EYE AND VISION.

The eye is of a globular form, and is composed of three coats, covering one another, and inclosing different substances called *humours*.

The three coats are the *sclerotica*, the *choroides*, and the *retina*.

The three humours are the *aqueous*, the *crystalline*, and the *vitreous*.

Objects are seen by means of their images being painted on the retina of the eye.

Though the images of objects are painted on the retina in an inverted state, yet they are seen erect.

Dimness of sight generally attends old people, which may arise either by the eyes growing flat and not uniting the

rays at the retina, or by the humours losing their transparency in some degree, which makes every object appear faint and indistinct.

Spectacles are intended to assist the sight of those whose eyes are either too round or too flat.

Concave glasses are necessary to those whose eyes are too *round*. When the eye is too round the rays proceeding from objects are converged to a focus before they get to the retina; to remedy this a concave glass is used, because the property of this is to *disperse* the rays, which prevents them from coming to a focus so soon as they otherwise would.

Convex glasses are necessary to those whose eyes are too *flat*. When the eye is too flat the rays proceeding from objects do not converge to a focus so soon as they reach the retina: a convex glass has the property of converging the rays, and of course of bringing them to a focus sooner than they otherwise would.

Eyes that have their humours of a due convexity cannot see an object distinctly at a less distance than about seven inches.

There are numberless objects too small to be seen at that distance.

OPTICAL INSTRUMENTS.

Microscopes are instruments for viewing small objects. They apparently magnify objects, because they enable us to see them nearer without affecting the distinctness of vision.

Take a piece of brown paper and make a pin-hole in it, then bring the eye close to the hole, and the paper within two or three inches of a small print, which will be apparently much magnified, though without the paper the letters would at that distance be wholly illegible.

There are three kinds of microscopes, the *single*, the *compound*, and *solar*.

The single microscope is only a small double convex lens, having the object placed in the focus, and the eye at the same distance on the other side.

The compound microscope consists of an object-glass and an eye-glass. The magnifying power of the compound microscope is in proportion as the image is larger than the object, and also according as we are able to view it at a less distance. There are generally two eye-glasses, by which means the object is less magnified, but more of it is seen.

The solar microscope depends on the sunshine, and is used in a darkened room. It is composed of a tube, a looking-glass, a convex lens, and a single microscope. The sun's rays are reflected by the *looking-glass* through the tube upon the object, the image of which is thrown upon a white skreen, sheet, &c. placed at a distance to receive it.

Telescopes are used for viewing objects at a great distance: of these there are two kinds, the *refracting* and the *reflecting*.

The common refracting telescope consists of an object-glass which is nearest the object, and an eye-glass next the eye. This telescope inverts the image with respect to the object, and makes it unfit for viewing terrestrial objects. The magnifying power of this telescope is as the focal distance of the object-glass is to the focal distance of the eye-glass. Therefore if the former be divided by the latter, the quotient will express its magnifying power.

A telescope to shew objects in their natural posture has three eye-glasses. The two additional lenses are to give the erect position of objects. The three eye-glasses have all their focal distances equal, and the magnifying power is found as before, by dividing the focal distance of the object-glass by the focal distance of one of the eye-glasses.

The *camera obscura* is made by fixing a convex glass in a hole of a window shutter, and if no light enters the room but through the glass, the picture of all objects on the outside may be seen in an inverted position, on a white paper placed in the focus of the lens.

The *magic lantern* is an instrument used for magnifying paintings on glass, and throwing their image upon a white skreen in a dark chamber.

The *multiplying glass* is made by grinding down the side of a convex glass into several flat surfaces:

ELECTRICITY.

THE earth and all the bodies with which we are acquainted are supposed to contain a certain quantity of an exceedingly subtile fluid, called the electric fluid. The certain quantity belonging to all bodies is called their natural share, and produces no sensible effects. When any body becomes possessed of more or less than its natural quantity,



it is said to be electrified, and is capable of exhibiting certain appearances which are ascribed to the power of electricity.

Take a stick of sealing wax, and rub it with your hand, or with a piece of flannel, or on your coat sleeve, and it will have the power of attracting small bits of paper or other very light substances, when held near them.

If a clean and dry glass tube be rubbed several times upwards and downwards, and then presented to any small light substances, it will immediately attract and repel them alternately for a considerable time. The tube is then said to be *excited*.

If a glass tube be rubbed several times in the dark, and then brought within about half an inch of the finger, a lucid spark will be seen between the finger and the tube, accompanied with a snapping noise, and the finger at the same time will perceive the sensation of a prick from a pin. The attraction, repulsion, sparkling, and noise, are the effects of electricity, and are denominated electrical appearances.

If an oblong piece of metal, such as a poker, be suspended by means of a dry silk string, and the excited glass tube be presented to its upper end, then the lower end of the metallic body will exhibit the same phenomena as the tube itself, which shews that the electric fluid passes through the metal.

If, instead of the metallic body, a stick of glass or sealing wax be suspended, none of these phenomena will be exhibited, which proves that the electric fluid does not pass through these substances.

All those bodies which, like the metallic substances, transmit electricity, are called *conductors* of that fluid.

Those substances that will not transmit the electric fluid, are called *electrics*, or *non-conductors*.

The metals, semi-metals, and metallic ores, are conductors of electricity; so also are charcoal, water and other fluids, excepting the aerial fluids and oil. Almost all saline and many earthy substances are likewise conductors.

The following substances are electrics or non-conductors of electricity; namely, vitrified substances, precious stones, amber, sulphur, resinous substances, wax, silk, cotton, feathers, wool, hair, paper, elastic fluids, sugar oils, metallic oxides, animal and vegetable ashes, dry vegetable substances, as baked wood, &c.

All substances **become** conductors when they are made hot.

When a body has **more** than its natural quantity of this fluid, it is said to be *positively* electrified : when it has **less** than its natural share, it is said to be *negatively* electrified.

When a conductor is so surrounded by non-conductors that the electric fluid cannot pass from it to the earth, it is said to be *insulated*.

The human body is a good conductor of electricity ; but if a person stand on a cake of resin or on a stool supported by glass legs, the electric fluid cannot pass from him to the earth.

If a smooth glass tube be rubbed with the hand, the electric fluid will leave the hand, and pass upon the tube, which will have more than its natural quantity.

Two substances, both positively or both negatively electrified, repel each other.

Two substances, of which one is positively and the other negatively electrified, attract each other.

If the person who rubs a glass tube be insulated, both the person and the glass tube become electrified, and capable of attracting and repelling light bodies : but the electricity of the person will differ from that of the tube, as the following experiments will shew.

Experiment 1. Let two cork balls, connected by a linen thread, be held by a silk thread attached to the middle of the former at some distance from a wall ; then bring the excited tube near the balls, and it will first attract, and soon after repel them ; this repulsion will continue for a considerable time, though the tube be removed.

2. Let another pair of cork balls be brought in contact with the insulated person, and they also will repel each other.

3. But if the two pairs of balls be brought near, they will attract each other, and the electrical virtue will disappear ; which shows that there are two electricities, one being the reverse of the other, and seeming to have what the other wants.

4. If the insulated person rub a stick of sulphur, or resin, or sealing wax, that substance will acquire the electricity which in the preceding experiment was acquired by the insulated man.

Hence positive and negative electricity have been called *vitreous* and *resinous*.

These electricities always accompany each other, for if

any substance acquire the one, the body with which it is rubbed acquires the other.

When one side of a conductor receives the electric fluid, its whole substance is instantly pervaded with it: whereas when an electric is presented to an electrified body, it becomes electrified in a small spot only.

If to one side of an electric, namely, a pane of window glass, you communicate positive electricity, the opposite side will be negatively electrified, and that plate is said to be charged.

The positive and negative electricities cannot come together, unless a communication by means of conductors is made between their sides.

When the two electricities are united, their virtues are destroyed, and the act of their union is called the electric shock.

Machines have been contrived for rubbing together electrics and conductors, and for collecting the electric fluid from surrounding bodies. These are called electrical machines.

FIG. 5, in the last plate, represents an electrical machine of the simplest sort. G E F is a strong board, which supports all the parts of this machine, and which may be fastened to a table by means of one or more iron brass clamps, as Q: the glass cylinder A B is supported by the two glass legs G and E; I R is the rubber, and I R K is a silken flap. This cushion or rubber is fastened to a spring which proceeds from a socket cemented on the top of the glass pillar S. The lower part of this pillar is fixed into a small board which slides upon the bottom board of the machine, and by means of a screw nut and a slit at H, may be fixed more or less forward, in order that the rubber may press more or less upon the cylinder. N F is a glass pillar which is fixed in the bottom board, and supports the prime conductor M L of hollow brass or tin plate, which has the collector or pointed wires at L, and a knobbed wire at M. From the brass knob O a longer spark may be drawn than from any other part of the conductor. When the cylinder is turned swiftly, the friction of the glass against the rubber causes the electric fluid which was in the rubber to pass to the glass, from whence it is conveyed to the prime conductor, the points of which *a* are presented to every part of the cylinder in succession. If one end of a chain be put on the knob *x*, and the other end hang on the ground, there will be a constant supply of the electric fluid to the prime conduc-

tor, which will be discharged in sparks to any body presented to it. The rubber is supplied by means of the things in immediate contact, and these again are supplied by the general mass of the fluid that is lodged in the earth.

ELECTRICAL ATTRACTION AND REPULSION.

Bodies that are charged with the same electricity repel each other ; but if one have more and the other less than its share, they will attract one another.

Experiment 1. If a tuft of feathers be hung on the prime conductor L M, Fig. 5, the moment they are electrified, by turning the wheel of the machine, they will endeavour to avoid one another and stand erect ; because being all electrified by the same electricity, they repel each other.

2. A large feather will, if placed in the hole z, when the machine is worked, become beautifully turgid, expanding its fibres in all directions ; and they collapse when the electricity is taken off by presenting any conducting substance to them.

3. Excite a glass tube 18 or 20 inches long, then present to it a small feather, which will first be attracted by it, and afterwards jump upon it. If no other body happen to be in the way, it will tend towards the ground ; but if the tube be held under it, it will be still repelled, and may be driven about for a considerable time.

4. Suspend a plate of metal from the conductor, and underneath it, at the distance of about three or four inches, put another plate of the same size ; upon the lower one, small feathers, pieces of paper, &c. may be placed, these will, as soon as the machine is worked, jump to the plate, from which they will be repelled, and fly to discharge themselves upon the lower plate, after which they will be attracted and repelled again, and so continue till the electricity of the upper plate is completely discharged.

5. If two balls made of cork or of the pith of elder, about the size of large pease, be fastened to silk threads, they will hang parallel to each other, and be in contact ; but when brought near the electrified prime conductor, they will strongly repel each other.

6. These balls, in their electrified state, shew whether the electricity is positive or negative ; for if it be positive, by applying an excited stick of sealing wax, the thread will collapse ; but if it be negative, the sealing wax will make them recede still further.

A pair of cork or pith balls is used to discover the presence

Fig. 6 represents a *quadrant* electrometer, which may be fixed in a hole *z* of the prime conductor, Fig. 5. It consists of a very light rod and pith ball A, turning on the centre of a semicircle B. According to the strength of the electricity the pith ball flies off, and the scale marks the degree in which the prime conductor is electrified.

If a body containing only its natural share of electricity be brought near a body that is electrified, positively or negatively, a part of the electricity, in the form of a spark, will force itself through the air, from the latter to the former. When two bodies, one electrified positively, the other negatively, approach each other, the superabundant electricity rushes violently from one to the other, to restore the equilibrium.

If an animal be placed so as to form part of this circuit, the electricity in passing through it produces a sudden and violent effect called the electric shock. The motion of electricity in passing from a positive to a negative body is so rapid, that it appears to be *instantaneous*.

When any part of one side of glass is presented to a body electrified positively or negatively, that side of the glass becomes possessed of the *contrary* kind of electricity to the side of the body it is presented to, and the other side of the glass is possessed of the same kind of electricity as the other body.

If the knob O of the prime conductor, Fig. 5, be electrified positively, and a pane of glass be presented to the side next to O, it will be negatively electrified, and the other side will be positively electrified. Electricity communicated to glass does not spread beyond the spot where it is thrown, on account of its non-conducting quality. Electricity may be communicated to the whole surface of glass or any part of it, if it be covered with a metallic substance, as tin-foil. This is called *coating* the glass.

If a conducting communication be made between both sides of a glass, thus *coated* and *charged* with electricity, a discharge takes place. Glass of any form, provided it be sound, will answer the purpose, but cylindrical jars are chiefly used. A glass bottle or jar properly coated for electrical purposes is called a *Leyden* phial, or jar, from the place where this property was discovered.

Fig. 7 represents a Leyden jar, coated with tin-foil on the inside and outside within about three inches of the top of its cylindrical part; and having a wire, with a round brass knob or ball A, at its extremity. This wire passes through the

cork or wooden stopple D : at its lower extremity is a piece of chain that touches the inside coating in several parts. To charge this jar, a communication is made between the electrical machine and the brass knob A, while the outside of the jar communicates with the earth by the table or the hand.

Experiment 1. Bring the knob A of the jar near the prime conductor, and after a few turns of the machine, the jar will be charged; that is, the inside of the jar will be positively and the outside negatively electrified; or if the inside is negatively, the outside will be positively electrified. R is a discharging rod, which is used to convey the superabundant electricity from one side to the other, where there is less than the natural share. The discharging rod consists of two brass knobs *a a*, attached to wires, which move round a joint *x* fixed to a glass handle R.

2. When one of the knobs is applied to the ball A, and the other to the outside coating, a communication is made between the outside and the inside of the jar, by which the equilibrium is instantly restored by the superabundant electricity passing from one side to the other, appearing in the form of a vivid flash, accompanied with a loud report.

3. A shock may be taken by putting one hand to the outside coating, as at *a*, and bringing the other to the knob A.

4. Any number of persons may receive the shock together by laying hold of each other's hands, the person at one end touching the outside of the jar, and the person at the other end bringing his hand near the knob A. If there were a hundred persons so situate, they would every one feel the shock at the same instant. The electric fluid may be conveyed many miles in a moment of time.

Several Leyden jars, connected together, by making a communication between all the outsides, and another communication between all their insides, form an electric battery.

Electricity, by means of the battery, is capable of producing the most powerful effects.

A very slender wire being made part of the circuit, will, by the discharge of the battery, instantly become red hot. It sometimes melts into small globules of different sizes.

If between two slips of window-glass some gold leaf be placed, and the slips of glass be pressed firmly together, and the shock from the battery be sent through them, the gold leaf will be forced into the pores of the glass.

If the gold leaf be put between cards, and a strong charge

Gunpowder may be fired by the electrical battery.

Metallic points attract the electricity from bodies silently, which renders them useful in defending buildings from lightning.

When electricity enters a point, it appears in the form of a star, when it goes out from a point, it puts on the appearance of a brush.

Instruments may be put in motion by the electric fluid which issues from a point : hence we have electrical orreries, mills, &c.

Lightning is the rapid motion of vast masses of the electric matter. *Thunder* is the noise produced by the motion of lightning. When the electric fluid passes through highly rarefied air, it constitutes the *aurora borealis*, or *northern lights*.

Most of the great convulsions of nature, such as earthquakes, whirlwinds, hurricanes, &c. are generally accompanied with and dependent upon electrical phenomena.

GALVANISM.

The science of galvanism appears to be another mode of exciting electricity : it derives its name from Galvani, who first discovered it.

Electricity, properly so called, is chiefly excited by friction ; but the effects of galvanism are produced by the chemical action of bodies upon each other. The nerves and muscles of animals are most easily effected by the galvanic fluid.

In 1791 Galvani of Bologna discovered that a dead frog may have its muscles brought into action by very small quantities of electricity. He also discovered that the same motions may be produced in the dead animal, merely by making a communication between the nerves and muscles by means of conducting substances.

If a living frog, or a live fish, as a flounder, having a slip of tin-foil pasted upon its back, be placed upon a piece of zinc, whenever a communication is formed between the zinc and tin-foil the spasms of the muscles are excited.

If a person place a piece of one metal, as a half-crown, above, and a piece of some other metal, as zinc, below his tongue, by bringing the outer edges of these pieces in contact, he will perceive a peculiar taste.

If a person in a dark place put a slip of tin-foil upon the bulb of one of his eyes, and a piece of silver in his mouth,

by causing these pieces to communicate, a faint flash of light will appear before his eyes.

The conductors of the galvanic fluid are divided into the *perfect* and *imperfect*.

The perfect conductors consist of metallic substances and charcoal. The imperfect conductors are water and oxydating fluids, as the acids and all the substances that contain these fluids.

The simplest galvanic combinations must consist of three different conductors, not wholly of one class. When two of the three bodies are of the first class, the combination is said to be of the first order; otherwise it is said to be of the second. It seems to be indispensably requisite that in simple galvanic circles, the conductors of one class shall have some chemical action upon those of the other.

If a piece of zinc be laid on a piece of copper, and a piece of card or flannel moistened with a solution of salt in water, and then three other layers in the same order, and so repeated several times, the whole will form a pile or battery of the *first* order.

When the three bodies which form a galvanic circle of the first order are laid upon one other, the upper and under one not touching, then these two extremes are in opposite electric states. The galvanic effects may be increased to any degree by a repetition of the same simple galvanic combination. These repeated combinations are called galvanic piles or batteries, which may be constructed of various forms.

By galvanism many facts are explained in common life, which were unintelligible before.

1. Porter is said to have a peculiar taste when drank out of a pewter vessel: here is a complete galvanic circle, of the second order; the moisture of the under lip is one conductor of the second class, the porter is the other, and the pewter is the conductor of the first class.

2. Another galvanic circle is seen by the discoloration of a silver spoon in eating eggs: the saliva and fluid egg are conductors of the second class, and the silver of the first.

3. Pure mercury retains its splendour a long time, but let it be amalgamated with tin, and it is quickly oxydated.

4. Works in metal, the parts of which are soldered together, soon tarnish in the places where the metals are joined.

5. The nails and the copper in the sheathing of ships are soon corroded about the place of contact. These are the effects of galvanism.

MAGNETISM.

MAGNETISM explains the properties of the loadstone or natural magnet, which is a dark coloured and hard mineral body, and is found to be an ore of iron. The magnetic properties may be communicated to other ferruginous bodies, which are thence called artificial magnets. These properties, however, act upon no other substance but iron. Natural and artificial magnets, as well as the bodies upon which they act, are either iron in its pure state, or such compounds as contain it.

All magnets attract iron. When a magnet is at liberty to move itself freely, it constantly turns the same part towards the north pole and the opposite part towards the south pole of the earth.

Those parts of the magnet's surface which it turns towards the poles of the earth are called the north and south poles of the magnet. The property of pointing to these poles is called its directive power : and when it places itself in that direction it is said to traverse.

The magnetic meridian is a plane perpendicular to the horizon, and passing through the poles of the magnet when standing in their natural direction.

The declination of the magnet or of the magnetic needle, is the angle which the magnetic meridian makes with the meridian of the place where the magnet stands.

The north or south poles of two magnets repel each other ; but the north pole of one attracts the south pole of another.

The inclination or dipping of the magnetic needle expresses the property which the magnet possesses of inclining one of its poles towards the horizon, and elevating the other pole above it.

Any magnet may, by proper methods, be made to impart its properties to iron or steel. When a piece of iron is brought within a certain distance of one of the poles of a magnet, it is attracted by it ; the attraction is strongest at the poles.

The magnetic attraction is not in the least diminished by the interposition of any bodies except iron. Soft iron is

attracted by the magnet more forcibly than steel, but is not capable of preserving the magnetic property so long. Heat weakens the magnetic power, and a great heat destroys it.

The gradual addition of weight to a magnet kept in its proper situation increases the magnetic power. The north pole of a magnet is more powerful in the northern, and the south in the southern parts of the world.

When a magnet with two poles is freely suspended or floats upon water with no iron near it, it places itself in the magnetic meridian, and it is this principle that makes it so useful to seamen.

When a magnet is kept freely suspended, so that it may turn north and south, the pilot, by looking at its position, can steer his course in any given direction.

An artificial magnet fitted up in a proper box is called the *magnetic needle*, and the whole together is called the *mariner's compass*.

Though the north pole of the magnet always points toward the northern, and the south toward the southern parts, yet that direction is seldom in the exact direction of the poles of the earth ; that is, the magnetic and the real meridian seldom coincide, and the angle which they make is called the angle of the declination of the magnetic needle. This declination is said to be *east* or *west*, according as the north pole of the needle is eastward or westward of the true meridian of the place. At present the declination of the magnetic needle is about 24 degrees westward.

If a magnetic needle be accurately balanced and suspended so as to turn freely in a vertical plane, the north pole will be depressed, and the south pole elevated above the horizon, this is called the *dip of the needle*.

A magnetic needle constructed for the purpose of shewing this property is called a *dipping needle*.

When a piece of iron is brought sufficiently near a magnet, it becomes itself a magnet. Bars of iron that have stood long in a perpendicular situation are generally found to be magnetical. If a long piece of hard iron be made red hot, and then suffered to cool in the direction of the magnetical line, it becomes magnetical. The electric shock will often render iron magnetical ; so also will lightning.

Artificial magnets are made by applying one or more powerful magnets to pieces of hard steel. The power of a magnet is not diminished by communicating its properties

to other bodies. Two or more magnets joined together may communicate a greater power to a piece of steel than either of them possesses singly.

A magnetic needle is made by fastening the steel on a piece of board, and drawing magnets over it, from the centre outwards.

. NATURAL HISTORY.

WHILE we contemplate the infinitely varied forms in the field of nature, and trace their gradations or connections, we possess the peculiar advantage of uniting amusement with instruction, and our minds are impressed with a train of the most pleasing ideas. It is no unimportant object, to be able to secure to ourselves some species of study, which, in its progress, may continue to afford a rational delight, and in the pursuit of which there can be no fear of soon exhausting the subject. The celebrated Ray, speaking of the study of natural history, says, "No knowledge can be more pleasant to the soul than this; none so satisfying, or that doth so feed the mind; in comparison of which the study of words and phrases seemeth insipid and jejune; for words being but the images of things, to be given up wholly to their study, what is it but to verify the folly of Pygmalion, to fall in love with a statue, and neglect the reality! The treasures of nature are inexhaustible: there is enough for the most indefatigable industry, the happiest opportunities, the most prolix and undisturbed vacancies."

The study of natural history consists in the collection, arrangement, and exhibition of the various productions of the earth. These are divided into the three grand kingdoms of nature, the animal, the vegetable, and the mineral. *Animals* inhabit the exterior parts of the earth, respire, and generate eggs; are impelled to action by hunger, affections, and pain; and by preying on other animals and vegetables, restrain within proper bounds and proportions the numbers of both. They have organized bodies, life, sensation, and the power of locomotion. *Vegetables* clothe the surface with verdure, imbibe nourishment through bibulous roots, breathe by leaves, and continue their kind by the dispersion of seed within prescribed limits. They are organized bodies, and have life, but not sensation. *Minerals* inhabit the interior parts of the earth. They are concrete bodies, without life or sensation

Dust and earth are the principle and matter of the composition of all solid bodies ; therefore these are found in all bodies decomposed by human art. From the union of earth with *salts, oils, sulphurs, &c.* result different kinds of earths, more or less compound, light, or compact. These lead us insensibly to the mineral kingdom. There is a great variety of *stones* ; and their form, colour, size, and hardness are very different. In them we find all sorts of saline and metallic particles ; whence minerals and precious stones proceed. In the latter class of stones some are found which are fibrous, and have laminæ, or a kind of leaves, as *slate, talc, lythophytes*, or stony marine plants ; the *amianthus*, or stony flower of mines ; and these lead us from the mineral to the vegetable kingdom. The plant which appears to occupy the lowest part of vegetable gradation is the *truffle*. Next come the numerous species of *mushrooms* and *mosses*, between which, *mould* on paste, &c. seems to form the connecting medium. All these plants are imperfect, and properly constitute only the limits of the vegetable kingdom.

The *polypus* seems to unite the vegetable and animal kingdoms. From its outward appearance, this singular production might be taken for nothing more than a mere plant, were it is not seen to perform real animal functions. This *zoophyte* seems to form the connecting link between plants and animals. *Worms*, which are at the commencement of the animal kingdom, lead us to *insects*. Those worms whose bodies are enclosed in a stony or scaly shell, seem to unite *insects* and *shell-fish*. Between them, or rather next to them, are found *reptiles* ; these, by means of the *water-snake*, are united to *fish*. The *flying-fish* leads us to *fowls*. The *ostrich*, whose feet very nearly resemble those of the *goat*, and who runs rather than flies, seems to connect *birds* with *quadrupeds*. And the *ape* joins hands with *quadrupeds* and *men*.

ANIMAL KINGDOM.

Several scientific and ingenious classifications or arrangements of the animal kingdom into classes, orders, genera, and species, have been successively adopted ; among which that of M. Cuvier, the celebrated French anatomist, must be allowed to possess a very high degree of merit. Though the arrangement of M. Cuvier evinces great anatomical precision, and the highest philosophical knowledge of animals, yet, upon the whole, it has a complicated and forbidding appearance to a general reader, and is of course less

immediately attractive than the more simple arrangement of Linnæus : which will be adopted here with some slight variations. Linnæus has divided the animal kingdom into six classes ; —*mammalia*, or such as suckle their young ; *aves*, birds ; *amphibia*, creatures living equally on land or in water ; *pisces*, fishes ; *insecta* insects ; and *vermes*, or worms. Each of these classes is subdivided into orders, genera, species, and varieties of those species.

We shall enumerate the different classes and orders, and some of the principal genera.

CLASS I.—MAMMALIA.

These are so named from their being provided with *mammæ*, or teats, for the purpose of suckling their young ; which circumstance sufficiently distinguishes them from all other animals. They are also called *viviparous* quadrupeds, as producing perfectly formed living young ; in opposition to what were formerly termed *oviparous*, or egg-producing quadrupeds, as tortoises, lizards, &c. The following are the general characters of the *mammalia*. They have warm and red blood. Their *skeleton*, as well as their *internal organs*, resemble, in a great degree, those of man. Their outward covering consists in general of *hair*, but in some few the animal matter or substance takes the form of distinct *spines* or *quills*, as in the porcupine and hedgehog tribe. In other *mammalia* the same substance is expanded into the appearance of very strong and broad *scales*, as in the quadrupeds of the genus *manis*, or pangolin. In the armadillos, instead of hair, we meet with *strong bony zones*, or bands, forming a regular suit of armour, and securing the animal from all common injuries.

The *feet*, in the *mammalia*, are generally four in number, and furnished with separate toes or divisions, guarded by claws, more or less strong in the different tribes. In the *monkeys* the feet have the appearance of hands ; and the claws often bear a great resemblance to the human nails. In some tribes of *mammalia* the feet are armed or shod with strong hoofs, either quite entire, or cloven or divided. In the *bat* tribe, the fore feet are drawn out into slender fingers of an immoderate length, and united by a common membrane or web. In *seals*, both the hind and fore feet are very strongly or widely webbed ; and in the *whales*, there are in reality only two feet, the bones of which are enclosed in what are commonly called the fins, while the lobes of the

tail, in some degree, answer the purpose of a pair of hind feet, but consist merely of strong muscles and tendons, without any internal joints or bones. The *arms*, or offensive and defensive weapons of the mammalia, besides the claws and teeth, are principally the *horns*, which are either perennial, or during the animal's life, or annual. The *teeth* are of three kinds: 1. Front or cutting teeth, of a broad compressed structure, designed for cutting their food. 2. Sharp, lengthened, or canine teeth, situated on each side the cutting teeth, and calculated for tearing and dividing the food. 3. Grinders, with broad angular tops, for comminuting or grinding the food. They are situated, as in the human subject, on each side the jaws. The teeth afford a principal character in forming the tribes and genera, or particular sets of quadrupeds: for in some the canine teeth are wanting; in others, the front teeth; and some few are totally destitute of any teeth. The *tail*, in quadrupeds, is formed by a continuation of the vertebræ or joints of the back-bone; and is in some of great length, and covered with very long hair; in others very short; and in some few entirely wanting, as in the real or genuine apes.

The *senses* of the mammalia consist, as in *man*, of the organs of sight, hearing, tasting, and smelling, and the power of feeling; and in many of these animals, the organs are of greater acuteness or sensibility than in man. The *eyes*, in some quadrupeds, are furnished with what is called a *nictitating* membrane, or semi-transparent guard, situated between the eyelids, and which can, at pleasure, be drawn over the ball of the eye, for additional defence. The *nose*, or organ of smelling, is more or less compressed and lengthened. In the *elephant* it is extended in a most wonderful manner into a long and tubular proboscis, or trunk, at the top of which are placed the nostrils. The *tongue* is usually of a flattened and lengthened shape; sometimes, as in the *cat* or *lion tribe*, beset on its upper surface with small reversed spines. In some few, as in the *ant-eater*, it is of a cylindric shape, and lengthened into the form of a worm, and can be extended at the pleasure of the animal. The *teats* or *mammæ* are found in all these animals, and, as before observed, gave rise to the Linnæan title of the whole class.* The mammalia are divided into the seven follow-

*Before we proceed to enumerate the different orders, we shall notice the fossil remains of that immense antediluvian animal, the *mammoth* or *megalonyx*, the whole race of which appears to be extinct. The structure of the teeth proves it to be a carnivorous animal. From the considerable part of a skeleton now re-

ing orders: *primates, bruta, feræ, glivæ, pecora, beluæ, and cete.*

Order 1.—PRIMATES. This is so entitled, as containing the chiefs of the creation. Its characters are, four front or cutting teeth above and below; and one canine or sharpened tooth on each side these. The feet are formed with a resemblance of hands, and the nails are more or less oval in shape. Most of the orders feed chiefly on vegetable substances. To this order belong the following genera. 1. *Simia*, ouran-outang, apes, monkeys, baboons. 2. *Lemur*, macauco. 3. *Vespertilio*, bat. In a merely zoological point of view, the first *genus* in the order *primates* is that of *homo*, or man, who is thus described:—erect; two-handed; prominent chin; teeth of uniform height, in an unbroken series; the lower incisors or cutting teeth perpendicular. The *varieties* of the human species, as arranged by Blumenbaeh, are five in number:

1. *Caucasian variety*, which includes the Europeans (excepting the Laplanders, and the rest of the Finnish race), the western Asiatics, as far as the river Ob, the Caspian Sea, and the Ganges, and the northern Africans.

2. *Mongolian variety*, which includes the rest of the Asiatics (excepting the Malays): the Finnish races of the colder parts of Europe, the Laplanders, &c. and the tribes of Esquimaux; extending over the northern parts of America from Bhering's Strait to the extremity of Greenland.

3. *Ethiopian variety*: contains the remaining Africans, besides those classed in the first variety.

4. *American variety*: to this belong all the Americans, except the Esquimaux.

5. *Malay variety* includes the inhabitants of Malacca, of the South Sea, Ladron, Philippine, Molucca, and Sunda islands. Each variety is distinguished by the colour of the hair, and some striking peculiarities of feature. We shall now briefly describe the external and internal structure of the human body, and the five senses.

External Structure of the human body.

Among all the visible parts of the body, the *head* holds the most distinguished place; both because of its beauty, and because it contains the principles of sense and motion.

meaning, it has been computed that the animal to which it belonged must have been nearly *twenty five feet* high, and *sixty* in length. The bones of one toe are entire: and the toe is more than three feet in length.

All the sentiments and passions of the soul are painted on the *face*, which is the most beautiful part of man, and where the principal organs of sense are found, through the medium of which we receive impressions from external objects. The different motions of the *lips*, and those of the *tongue*, whether it touch the palate or the teeth, serve for the articulation of words, and the different inflexions of sound. By the *teeth* we can cut or grind our food ; and the *saliva*, so necessary to digestion, is furnished by a great number of glands, which are contained in the mouth. The head is placed upon the *neck*, and turns, as on a pivot, to any side we please. After the neck come the *shoulders*, so formed that they are able to bear heavy loads. To the shoulders the *arms* are joined ; and to those the *hands*, which are so constructed as to perform an infinity of motions ; to touch, take, raise up, draw back, repel, &c. the joints and bones serving to support and facilitate these motions.

The *breast* includes and defends the heart and the lungs : and for this purpose, it is composed of strong and hard ribs and bones. The *diaphragm* separates the *breast* and *belly*, which contain the stomach, liver, spleen, and intestines. All this mass rests upon the *hips*, *thighs*, and *legs*, which, like the arms, have different articulations, favourable to motion and rest. The *feet* sustain the whole, and the toes also contribute to it, because they serve to fix the feet more firmly upon the ground. The *skin* and *flesh* cover the whole body. The *hair* and the *down* which are found in different parts, protect them from the injurious effects of cold.

Internal Structure of the Human Body.

The *heart*, placed in the *thorax* or *breast*, is the spring of motion to the whole machine. The substance of the heart appears to be a series of fleshly fibres, woven together with admirable art. This substance has two inward cavities, which are called *ventricles* ; and which are separated from each other by a fleshly partition. Here one vein is found which conducts the blood from the upper part of the body into the right ventricle ; another, which brings back the blood from the lower parts into that same cavity ; an artery which sends it into the lungs ; and another vein, by which it returns from the lungs into the left ventricle ; whence it is distributed all over the body by the great artery. On the side of the right ventricle is a sort of cavity, or muscular bag, which is called the *auricle* ; and which re-

ceives the blood before it enters into the right ventricle. Another *auricle*, not less useful, hangs at the left *ventricle*, that the blood may stop there, during a new contraction. All the blood passes through the heart; some is continually going in and coming out: and by the contractions of the heart and arteries, it is propelled to every part of the body, and circulates through all the veins.

The *lungs* are a spungy body, which, like *bellows*, open and shut, to take in and expel the air. They extend on both sides, and nearly fill up the whole capacity of the breast, to cool it with the air which they *inspire*, and to prevent the blood from being too much attenuated. The breast is covered on the inside with a fine thin membrane, called the *pleura*. Under the lungs the *stomach* is placed, which receives and digests the food, and is shaped like a purse. On the right side is the *liver*, which covers one side of the stomach, and by its heat assists digestion. It separates the *bile* from the blood, which is collected in a particular vessel called the *gall-bladder*; this liquid descends into the intestines; and the irritation which it there occasions helps to expel the excrements.

Opposite to the liver is the *spleen*, which is a soft bag, and easily stretched. The blood is brought into it by the arteries, and proceeds from it by the veins. Behind the liver and the spleen are the *reins* or *kidnies*. Of these there are two, one on the right and the other on the left; their use is to separate from the mass of blood the humours which empty themselves in the bladder. Under these parts are situated the *intestines*, which are attached to the mesentery; they complete the separation of the digested food; and what is unfit for nutriment they expel from the body. The *mesentery* is a great membrane, with a variety of foldings, to which the intestines are attached. In the mesentery are seen innumerable vessels as fine as hairs, which are termed the *lacteals*, because they contain a juice extracted from the food, similar to *milk*. In the middle of the mesentery is a large gland, where the *lacteal* veins unite as in a common centre. A skin full of folds, glands, and muscles, covers all the intestines. All that part of the body called the abdomen, which begins at the stomach, is separated from the breast by the *diaphragm* or *midriff*. It has several openings, to give passage to the vessels which are to descend to the inferior parts. The liver and spleen are fastened to it. Laughter is occasioned by an agitation of this mem-

brance: and this, it is supposed, helps to disengage the spleen from the humours which incommode it.

Such are the principal parts of the *thorax* and *abdomen*; but besides these there are several others which communicate with them. At the beginning of the neck are the *œsophagus* (gullet) and *windpipe*. The *œsophagus* is the canal, through which the food passes into the stomach: by the windpipe, the air penetrates into the lungs. When the lungs send back the air through this channel, the voice is formed; and at the same time the breast throws off its superfluous humours. At the top of the windpipe is a small *valve* or covering, which opens to give passage to whatever is to come out by this tube. The lower orifice of the stomach is provided with a similar valve, which opens when it is pressed by the food, and shuts again to prevent it from returning. In the upper part of the head the *brain* is placed; which is capable of receiving impressions from external objects. Its whole mass is covered with two fine transparent membranes; the outer of which is called the *dura mater*, the inner the *pia mater*. The former has a multitude of arteries and veins interspersed over it; the latter closely invests the substance of the brain.

Besides these parts, each of which occupies a determinate place; there are others which are dispersed over the whole body, such as the bones, arteries, veins, lymphatics, and nerves. The *bones*, united together, by joints, serve partly to support the body, and render it capable of motion; and partly to preserve and protect its nobler parts. The *arteries* and *veins* are diffused through the whole body, to nourish it by the blood which circulates in them. There are also many *lymphatic vessels*, which ordinarily join to certain glands, and receive a yellowish and transparent liquor, which they distribute afterwards to the whole body.

The *nerves*, of which ten principal pair are reckoned, are like little cords; they proceed from the brain, and distribute themselves over the whole body; they include a kind of medullary substance like that of the brain, and are the organs of sense and motion to the whole machine. All these parts are pierced with holes, in order that the light and subtle matter which superabounds may transpire. These holes, which by their extreme fineness are invisible to the naked eye, are called *pores*. The same wisdom, so visible in the solid parts of our bodies, is found equally so in the fluid. The *blood*, *chyle*, *lymph*, *bile*, *marrow*, *nervous juice*,

and the different kinds of viscous and glutinous humours, which innumerable glands furnish; their several properties, ends, effects, the manner in which they are prepared, filtrated, and separated from each other; their circulation, and reparation, all announce the most astonishing art, and the most profound wisdom.

Let us now recapitulate what we have said on the internal structure of the human body. The *bones*, by their joints and solidity, form the ground-work, or frame, of this beautiful edifice. The *ligaments* are the cords which fasten all together. The *muscles* are fleshy substances, which execute their functions as elastic springs. The *nerves*, which extend to all parts of the body, establish between them the most intimate connection. The *arteries* and *veins*, like rivers, convey health and life to every part.

The *heart*, placed in the centre, is the focus, where the blood collects, and the *primum mobile*, from, and by means of which, it is circulated and preserved. The *lungs* by another power, take in the external air, and expel noxious vapours. The *stomach* and *intestines* are the magazines and laboratories where those matters are prepared which are necessary for daily supply. The *brain*, the seat of the soul, is formed in such manner as is suitable to the dignity of its inhabitant. The *senses*, the servants of the soul, give it information of all that is necessary for it to know; and minister to all its pleasures and wants.

The Senses.

Vision. See OPTICS, *the Eye and Vision*, p. 305.

Hearing. The undulations of the atmosphere, excited by the vibrations of sonorous bodies, are collected in the external ear and auditory passage, as in a hearing trumpet, and are conveyed to the *membrana tympani*, or drum, which they cause to vibrate. The effect is transmitted through the small bones to the watery fluid that fills the internal ear, in which the delicate filaments of the auditory nerve float, and by this nerve the sensation is conveyed to the brain.

Smelling. The cavity of the nose is divided into two parts called the *nostrils*, by a partition, of which the upper part is bony, and the lower cartilaginous. The upper part of the cavity is covered with a thick glandulous membrane, above which the *olfactory nerve* is finely branched out and spread over the membrane of the spongy bones of the nose, and other sinuous cavities of the nostrils. The odorous

effluvia of bodies being disseminated in the atmosphere, the latter fluid passes through the nose in respiration, and the odorous particles are thus brought into contact with the fibres of the nerves, which, by their communication with the brain, excite in the mind the sense of smell.

Tasting. The tongue is covered with two membranes ; the external is thick and rugged, especially in quadrupeds ; the internal membrane is thin and soft ; upon it appear several *papillæ* or small elevations, like the tops of the small horns of snails. These *papillæ* are composed of the extremities of the nerves of the tongue, and piercing the external membrane, are constantly affected by those qualities in bodies which have their tastes excited in the mind by means of these nervous *papillæ*, which are the immediate organ of tasting. This organ bears a considerable analogy to the sense of touch.

Touching. The outside of the skin is covered by a thin pellicle, called the *epidermis*, cuticle, or scarf-skin. Under the cuticle is a substance called *rete mucosum*. In negroes this substance is of a black colour, but in Europeans white, brown, or yellowish. The *cutis vera*, or the skin, is a substance made up of fibres closely connected with each other, and running in various directions, being composed of the extremities of numerous vessels and nerves. The *papillæ* of the fingers or inside of the hand, may become erect or elevated, and being gently pressed against a tangible body, receive an impression which is conveyed to the brain, and is called *touch*.

Order 2.—*BRUTA* is characterized by a want of front or cutting teeth, both in the upper and lower jaw. The feet are armed with strong claws ; their pace is, in general, somewhat slow, and their food is principally vegetable. The genera are, 1. *Bradypus*, sloth. 2. *Dasypus*, armadillo. 3. *Manis*, pangolin. 4. *Myrmecophaga*, ant-eater. 5. *Platyus*, ornithorhynchus, or duckbill.* All the animals belonging to these genera are totally destitute of front teeth, and some are destitute of all teeth.

* This extraordinary animal exhibits the bill of a duck engrafted upon the head of a quadruped. The whole animal is thickly covered with a strong but soft and glossy hair, and has four webbed feet, furnished with sharp claws. This dubious quadruped is a native of Australasia, or New Holland, and is supposed to feed on worms, water insects, and weeds. It is obliged to rise every now and then to the surface, in order to breathe, and at this juncture it is principally taken, by transfixing it with a small harpoon.

Order 3.—FERÆ contains the predacious quadrupeds, or animals of prey, and consists of several genera, all agreeing in having teeth evidently calculated for feeding on flesh. The front teeth, which are usually six both above and below, approach to a conic or pointed figure; the canine teeth are long, and the grinders not flattened at the top, but are of a sharpened form; the claws also, with which the feet are furnished are sharp, and more or less curved in the different species. The genera are, 1. *Canis*, dog, wolf, hyæna, fox, and jackal. 2. *Felis*, cat, lion, tiger, leopard, lynx, panther, &c. 3. *Viverra*, weasel, ferret, polecat, civit. 4. *Ursus*, bear. 5. *Didelphis*, opossum. 6. *Macropus*, kangaroo. 7. *Talpa*, mole. 8. *Sorex*, shrew. 9. *Erinaceus*, hedgehog.

Order 4.—GLIRES, or sleepers, from the latin word *glis*, signifying an animal of the dormouse tribe. The principal character of the animals composing this order consists in a pair of very conspicuous, strong, and lengthened teeth, placed close together in the front of both jaws. They have no canine teeth, but are furnished with grinders on each side. The genera are, 1. *Hystrix*, porcupine. 2. *Castor*, beaver. 3. *Mus*, mouse and rat. 4. *Cavia*, guinea-pig, 5. *Arctomys*, marmot. 6. *Lepus*, hare. 7. *Sciurus*, squirrel. 8. *Myoxus*, dormouse. 9. *Dipus*, jerboa. 10. *Hyrax*, Cape and Syrian rabbit.

Order 5.—PECORA. The leading character in this order is the total want of front teeth in the *upper* jaw. In the lower jaw there are six or eight front teeth; the grinders or side teeth are usually pretty numerous, and such of the pecora as are furnished with horns, have no tusks or canine teeth; which, on the contrary, are conspicuous in such as are not furnished with horns. The pecora have the power of *rumination*, that is, of throwing up into the mouth at intervals, a portion of the food which has been hastily swallowed, during their feeding, in order that it may undergo a more complete grinding by the teeth. This action is so conspicuous in cows, and other cattle, that every one is perfectly acquainted with it. All the pecora, or ruminants, as they are often called, are *hoofed*; and in the major part the hoof is divided into two principal parts, with the addition in many of two very small undivided hoofs or processes on each side, or rather behind the principal ones. In the *camel* the sole, or part beneath the hoofs, is swelled into a

kind of elastic pad, covered with an extremely strong, but flexible skin admirably adapted for enabling the animal to travel over the dry and sandy deserts, which it is chiefly destined to inhabit. The whole order pecora, without an exception, feeds entirely on vegetable food. The genera are, 1. *Elephas*, elephant. 2. *Camelus*,* camel, dromedary, lama, vicuna. 3. *Giraffa*, giraffe or cameleopard†. 4. *Cervus*, elk, deer kind. 5. *Bos*, ox, buffalo. 6. *Moschus*, musk. 7. *Antelope*, antelope, chamois. 8. *Ovis*, sheep. 9. *Capra*, goat.

Order 6.—**BRILLUE** consists in general, of animals either of large or moderate size, of an unshapely form, and having a tough and thick hide. It comprises the following genera: 1. *Equus*, horse, ass, zebra. 2. *Rhinoceros* 3. *Hippotamus*. 4. *Tapir*. 5. *Sus*, pig kind, pecari, babiroussa.

The *pinnated* mammalia are those in which the divisions or toes of the feet, are connected by webs; enabling the animals, whose principal residence is in the waters, to swim with far greater facility than any other quadrupeds; while, on the contrary, they walk with much greater difficulty. There are two genera: 1. *Phoca*, seals. 2. *Trichecus*, morse, or walrus, manati or sea-cow.

Order 7.—**CETE** or **CETACEA**, comprises the cetaceous mammalia, or whale tribe. These cannot, in strict propriety,

* The fluid drunk by the camel and the lama is deposited in numerous cells, formed in the substance of their first and second stomachs, by strong bands of muscular fibres crossing each other, and the animal has the power of closing these cells by the contraction of those fibres which form the mouth of the cavities, or of expelling the contained fluid, by putting the other portions of fibres in action. As all the food which the animal takes passes into the first stomach, the water of the cells in that part becomes turbid, but it remains perfectly pure in the second, travellers having, upon the greatest emergencies, killed the camel for the sake of the water. The muscular bands are particularly strong, and by drawing the third stomach to the oesophagus or gullet, the ruminated food is conveyed through the second without polluting the water in its cells.

† The giraffe is by far the tallest of all known quadrupeds, measuring the extraordinary height of *seventeen feet three inches*, from the hoof of the fore foot to the top of the head, while the body scarcely exceeds that of a horse. It is of a pale, yellowish, or whitish brown, with numerous spots of a chestnut colour, and its whole aspect is at once simple and elegant. It is a harmless timid animal, living in small herds of six or seven together, in the plains that border on Caffraria, in the vicinity of the Cape. The giraffes are so exceedingly shy that it is with the greatest difficulty they can be approached: they feed on the fruit of the wild apricot, and on the tender branches of the several species of the *mimosa*, or sensitive plant. The only two specimens in England (perhaps in Europe) are preserved in the Museum of the College of Surgeons and in the collection of Mr. Bullcock.

be called quadrupeds, since they are not only furnished with two feet which have the appearance of thick fins, while the tail is merely muscular and tendinous. But since the whole interior structure agrees with that of the mammalia; since they have lungs and breathe—since they have warm blood, and a heart resembling in conformation that of quadrupeds—and, in particular, since they produce and nourish their young in the same manner—it follows very clearly that they can with propriety be ranked in no other class of animals than the Linnæan mammalia. The genera are, 1. *Balæna*, proper whales.* 2. *Physeter*, spermaceti whales. 3. *Delphinus*, dolphin, porpoise, grampus. 4. *Monodon*, narwhale, sea-unicorn.

CLASS 2.—BIRDS.

The skeleton or bony frame of the animal is, in general, of a lighter nature than in quadrupeds, and is calculated for the power of flight: the spine is immoveable, but the neck lengthened and flexible; the breast-bone very large, with a prominent keel down the middle, and formed for the attachment of very strong muscles. The bones of the wings are similar to those of the four legs in quadrupeds, but the termination is in three joints or fingers only, of which the exterior one is very short. What are commonly called the *legs* are analogous to the hind legs in quadrupeds, and they terminate in general in four toes, three of which are commonly directed forwards, and one backwards; but in some birds there are only two toes, in some only three. All the bones in birds are much lighter, or with a larger cavity, than in quadrupeds.

The *feathers* with which birds are covered resemble in their nature the hair of quadrupeds, being composed of a similar substance appearing in a different form. Beneath, or under the common feathers or general plumage, the skin in birds is immediately covered with a much finer or softer feathery substance, called *down*. The *throat* after passing down to a certain distance, dilates itself into a large membranaceous bag, answering to the stomach in quadrupeds: it is called the *crop*, and its great use is to soften the food taken into it, in order to prepare it for passing into another

* The *aorta*, or principal artery, in this stupendous animal, measures about a foot in diameter, and it is computed that the quantity of blood thrown into it at every pulsation of the heart is not less than from *ten to fifteen gallons*.

strong receptacle, called the *gizzard*. This, which may be considered as a more powerful stomach, consists of two very strong muscles, lined and covered with a strong tendinous coat, and furrowed on the inside.* In this receptacle the food is completely ground, and reduced to a pulp. The *lungs* of birds differ from those of quadrupeds in not being loose or free in the breast, but fixed to the bones, all the way down: they consist of a pair of large spongy bodies, covered with a membrane, which is pierced in several places, and communicates with several large vesicles or air bags, dispersed about the cavities of the body.

The *eyes* of birds are more or less convex in the different tribes; and in general it may be observed that the sense of *sight* is more acute in birds than in most other animals. Birds have no outward *ear*, but the internal one is formed on the same general plan as in quadrupeds. Birds are *oviparous* animals, always producing *eggs*, from which the young are afterwards excluded. The first appearance of the young, as an organized body, begins to be visible in six hours after the egg has been placed in a proper degree of heat under the parent animal. The chick, or young bird, when arrived at its full size and ready for hatching, is by nature provided with a small and hard protuberance at the tip of the bill, by which it is enabled the more readily to break the shell, and which falls off some hours after its hatching. Birds are divided by Linnæus into six orders: *accipitres*, *picæ*, *passeres*, *gallinæ*, *grallæ*, and *anseræ*.

Order 1.—ACCIPITRES are birds of prey, and feed entirely on animal food. The bill is more or less curved, strong, and often covered round the base by a naked membrane called a *cere*; and on each side, towards the tip, is a projection forming a kind of tooth, and serving to tear the prey. The wings are large and strong, and the whole body stout and muscular; the legs strong and short; the claws much curved, and sharp pointed. The genera are, 1. *Vultur*, vultures. 2. *Falco*, falcon, eagle, hawk, kite. 3. *Strix*, owl. 4. *Lanius*, shrike or butcher-bird.

Order 2.—PICÆ or PIES. The bill is commonly of a slightly compressed and convex form. They build their nests or deposit their eggs in trees, and their food is prin-

* In the birds of prey or *accipitres* this is wanting, the stomach being allied to that of quadrupeds.

cipally of a vegetable nature, though some genera feed on insects. The genera are, 1. *Buceros*, rhinoceros bird. 2. *Ramphastos*, toucan. 3. *Psittacus*, parrot kind. 4. *Picus*, woodpecker. 5. *Paradisea*, birds of paradise. 6. *Alcedo*, kingfisher. 7. *Cuculus*, cuckoo. 8. *Trochilus*, humming-bird. 9. *Corvus*, crow, raven, jackdaw, magpie, jay. 10. *Coracias*, roller.

Order 3.—PASSERES. The bill is formed so as to operate in the manner of a forceps; their limbs are rather weak: their flight is quick, with a frequent repetition of the movement of the wings, and they chiefly build in trees or shrubs. They excel in the art of *nidification*, or constructing their nests. Their food is either animal or vegetable; some live chiefly on insects, some on seeds, and some on both. The genera are, 1. *Columba*, pigeons. 2. *Turdus*, thrush, blackbird. 3. *Ampelis*, chatterer. 4. *Loxia*, gross-beak. 5. *Emberiza*, bunting. 6. *Motacilla*, nightingale, red-breast, wren, waterwagtail, tailor-bird. 7. *Hirundo*, swallows, martins. 8. *Caprimulgus*, goat-sucker. 9. *Alauda*, lark. 10. *Sturnus*, starling. 11. *Fringilla*, finches, canary-bird, linnet, sparrow.

Order 4.—GALLINÆ includes all those birds which are allied in habit or general appearance, as well as in their mode of life, to the common domestic fowl. The birds of this tribe have, in general, heavy bodies, short wings, very convex, strong, and rather short bills: they have strong legs, and the toes are generally connected at the base by a strong membrane, reaching as far as the first joint. They are furnished with rather broad claws, formed for scratching up the ground in search of food and for other purposes. They feed chiefly on grain and seeds, and sometimes on insects. The genera are, 1. *Tetrao*, grouse, quail, partridge, 2. *Numida*, guinea-fowl. 3. *Meleagris*, turkey. 4. *Phasianus*, pheasant. 5. *Pavo*, peacock. 6. *Otis*, bustard. 7. *Didus*, dodo. 8. *Struthio*, ostrich. 9. *Casuarius*, cassowary or emu.

Order 5.—GRALLÆ or WADERS. The bill is generally rather long, the legs lengthened, and the thighs often bare of feathers above the knee. Their chief residence is in watery situations, and their food consists of various kinds of aquatic animals, though some feed also on vegetable substances: Their nests are often on the ground, but sometimes

on tall trees. The genera, are, 1. *Ardea*, crane, storke, heron, bittern. 2. *Mycteria*, jabiru. 3. *Tantalus*, ibis. 4. *Nume-nius*, curlew. 5. *Parra*, jacuna. 6. *Psophia*, trumpeter. 7. *Platalea*, spoon-bill. 8, 9. *Tringa* and *Charadrius*, snipe and plover tribe. 10. *Phanicopterus*, flamingo.

Order 6.—**ANSERES** consists of such birds as have very strongly or conspicuously webbed feet, and are, from their general structure, calculated for swimming. The feet in all are very widely webbed, the legs strong and short, and the whole body stout, fat, and muscular. Their food consists of fish and other water-animals, and frequently of water-plants. Their nests are generally on the ground, but sometimes on lofty rocks. The genera are, 1. *Colymbus*, diver. 2. *Larus*, gull. 3. *Procellaria*, petrel. 4. *Diomedea*, albatross. 5. *Pelecanus*, pelican, cormorant. 6. *Anas*, swan, duck, goose. 7. *Mergus*, goosander. 8. *Alca*, awk, puffin, 9. *Aptenodytes*, penguin.

CLASS 3.—AMPHIBIA.

This class includes all animals who live with equal facility on land or in water, and some others which do not exactly conform to this description. The amphibia, from the structure of their organs and the power they possess of suspending respiration at pleasure, can support a change of element uninjured, and endure a very long abstinence. The *lungs* differ widely in appearance from those of other animals. Many of the amphibia are possessed of a high degree of productive power, and will be furnished with new feet, tails, &c. when by any accident those parts have been destroyed. Their bodies are sometimes defended by a hard horny shield or covering: sometimes by a coriaceous, or leathery integument; sometimes by scales, and sometimes have no particular coating. The amphibia, in general, are extremely tenacious of life, and will continue to move and exert many of the animal functions, even when deprived of the head itself. By far the greater part are *oviparous*, some excluding eggs, covered with a hard or calcareous shell, like those of birds; others such as are covered only with a tough skin, resembling parchment; and in many, they are perfectly gelatinous, without any kind of external covering, as in the spawn of a common frog. The amphibia are divided into **REPTILIA**, containing the amphibia pedata, or footed amphibia; and the **SERPENTES**, or footless amphibia.

In the **REPTILIA** there are four genera: 1. *Testudo*, tortoise, turtle. 2. *Rana*, frog, toad. 3. *Draco*, dragon, or flying lizard. 4. *Lacerta*, lizards, crocodile, chameleon, newt, salamander, iguana.

The **SERPENTES**, or serpents, are generally distinguishable from the rest of the amphibia, by their total want of feet. One of the most singular properties of the serpent tribe is that of casting their skin from time to time. When this takes place, so complete is the spoil or coat-skin, that even the external coat of the eyes themselves makes a part of it. Among the *poisonous* serpents, the fangs or poisonous teeth are always of a tubular structure, and furnished with a small hole or slit, near the tip; they are rooted into a particular bone, so jointed to the remainder of the jaw on each side, as to permit the fangs or poisoning teeth to be raised or depressed at the pleasure of the animal. Above the root of each is a glandular reservoir of poison, which in the act of biting is pressed into the tube of the tooth, and discharged into the wound through the hole near the tip. The genera are, 1. *Crotalus*, rattlesnake. 2. *Boa*, immense serpents of India and Africa. 3. *Coluber*, viper. 4. *Anguis*, blindworm. 5. *Amphisbana*. 6. *Cacilia*. 7. *Acrochordus*. 8. *Hydrus*. 9. *Langaya*. 10. *Siren*.

CLASS 4.—FISHES.

Like the amphibious animals, their heart is unilocular, or consists but of one chief cavity, and their blood is far less warm than that of quadrupeds and birds. The organs of breathing in fishes are called *gills*, and consist of a vast number of blood-vessels. The generality of fishes are covered with scales, of various forms and size in the different tribes; which scales are analogous to the hair of quadrupeds, and the feathers of birds. The chief instruments of motion, the *fins*, consist of a certain number of elastic rays or processes, either of one single piece, in the form of a spine, or of jointed pieces. * The strong or spiny rays are usually placed at the fore part of the fin, and the soft or jointed rays towards the back part. By the various flexures of these organs, the movements of fishes are conducted; the perpendicular fins, situated on the back or upper part of the animal, keeping the body in equilibrio, while the tail operates as a rudder at the stern of a vessel, and the side or breast-fins as oars. The stomach is large, and the intestines far shorter than in quadrupeds and birds: the liver is very large, and usually placed on the left side.

The *air-bladder*, or swimming bladder, which occurs in

the majority of fishes, is a highly curious and important organ. It generally lies close beneath the back-bone, and is provided with a very strong muscular coat, which gives it the power of contracting at the pleasure of the fish, so as to condense the contained gas, or elastic air, with which it is filled, and thus enable the animal to descend to any depth, and again to ascend by being restored to its largest size. Some fishes are totally destitute of the air-bladder, and are observed to remain always at the bottom: as the whole tribe of what are termed flat-fish. The *teeth* are, in some tribes, very large and strong; in others very small; in some sharp; in others obtuse; in some very numerous; and in others very few. Sometimes they are placed in the jaws; sometimes in the palate or tongue; or even at the entrance of the stomach. The *eyes* are, in general, large, and very much flattened, or far less convex than in quadrupeds or birds; this structure being better calculated for giving them an easy passage through the water. In return, the central part of the eye, or what is called the crystalline humour, is of a round or globular shape, in order to give the animal the necessary power of vision, and to compensate for the comparative flatness of the cornea.

The organ of *smelling*, in fishes, is large; and the animals have the power of contracting or dilating it at pleasure. This sense is supposed to be extremely acute. The organ of *hearing* differs, in some particulars, from that in other animals, and is modified according to the nature of the fish. They are entirely destitute of *voice*. The particular kind of sound which some tribes are observed to produce on being first taken out of the water, is entirely owing to the sudden expulsion of air from their internal cavities. The greater number of fishes are *oviparous*, producing soft eggs, usually known by the name of spawn. There have been 200,000 ova or eggs found in a carp; in a perch, weighing one pound two ounces, 69,216; in a carp of eighteen inches, 342,144; and in a sturgeon of one hundred and sixty pounds there was the enormous number of 1,467,500. The age of fish is determinable by the number of concentric circles of the vertebræ or joints of the back-bone. In the Linnæan arrangement of fishes, the under or belly-fins are termed *ventral*, and are considered analogous to the feet in quadrupeds; and it is from the presence or absence of these fins that the divisions are instituted.

Order I.—*APODES*, or footless fishes, are entirely destitute of ventral fins. The genera are, 1. *Muraena*, eel kind.

2. *Gymnotus*, electric eel. 3. *Anarrhichas*, sea-wolf. 4. *Xiphias*, sword-fish. 5. *Ammodites*, launce. 6. *Ophidium*. 7. *Stromateas*, 8. *Trichiurus*.

Order 2.—JUGULARES, or jugular fishes, have the ventral or belly-fins placed more forward than the pectoral or breast-fins. The genera are, 1. *Gadus*, haddock, cod, whiting, ling. 2. *Uranoscopus*, stargazer. 3. *Blennius*, blenny. 4. *Callionymus*, dragonet. 5. *Trachinus*, weever.

Order 3.—THORACICI, or thoracic fishes, have the ventral fins situated immediately below the pectoral ones. The genera are, 1. *Gymnetrus*, comet-fish. 2. *Echeneis*, sucking-fish. 3. *Coryphæna*, dorado. 4. *Zeus*, dory. 5. *Pleuronectes*, flounder, plaice, dab, halibut, sole, turbot. 6. *Chætodon*. 7. *Sparus*. 8. *Perca*, perch. 9. *Scomber*, mackerel, bonito, tunny. 10. *Mullus*, mullet. 11. *Acanthurus*, thorn-tail. 12. *Holocentrus*. 13. *Sciæna*. 14. *Trigla*, gurnards.

Order 4.—ABDOMINALES, or abdominal fishes, have the ventral fins placed below the pectoral ones, and chiefly inhabit fresh water. The genera are, 1. *Cobitis*, loach. 2. *Silurus*. 3. *Exocoetus*, flying-fish. 4. *Salmo*, salmon, trout, smelt, char, grayling. 5. *Esox*, pike. 6. *Clupea*, herring, sprat, shad. 7. *Cyprinus*, carp, tench, gold-fish, minnow.

CARTILAGINOUS FISHES, improperly admitted into the amphibia by Linnæus, differ from the rest of the fish tribe, in having a cartilaginous or sinewy, instead of a bony skeleton, and in being destitute of ribs. They are divided into two orders, chondropterygii, and branchiostegi.

Order 1.—CHONDROPTERYGII, or such as have no gill-cover. The genera are, 1. *Petromyzon*, lamprey. 2. *Gastrobranchus*. 3. *Raia*, skate, torpedo, stingray. 4. *Squalus*, shark, saw-fish. 5. *Lophius*, sea-devil, frog-fish. 6. *Callistes*, file-fish. 7. *Chimæra*.

Order 2.—BRANCHIOSTEGI, or having a gill-cover. The genera are, 1. *Accipenser*, sturgeon, beluga. 2. *Ostracion*, trunk-fish. 3. *Tetodon*. 4. *Diodon*, porcupine-fish. 5. *Cyclopterus*, lump-sucker. 6. *Centriscus*. 7. *Syngnathus*, pipe-fish. 8. *Pegasus*.

CLASS 5.—INSECTS.

Insects are distinguished from other animals by their being furnished with several feet ; never fewer than six, and sometimes with many more ; by their breathing, not through lungs, but by spiracles or breathing holes, situated at certain distances along each side of the body ; and lastly, by the head being furnished with a pair of *antennæ*, or jointed horns, which are extremely various in the different tribes. The first state in which the generality of insects appear is that of an *egg*. From this is hatched the animal in its second state, in which it is often but improperly called the *caterpillar*. The insect, in this state, is the *larva* or larve, being a mask or disguise of the animal in its future form. The larve differs in its appearance according to the tribe to which it belongs. When the time arrives for the larve to change into its next state of *chrysalis*, or *pupa*, it ceases to feed, and having placed itself in some quiet situation, for the purpose, lies still for several hours ; and then, by a kind of laborious effort, frequently repeated, divests itself of its external skin, or larve-coat, and immediately appears in the very different form of a pupa.* The pupa emerges at length the complete insect, in its perfect or ultimate form, from which it can never after change, nor can it receive any further increase of growth. This last or perfect state is termed the *imago*.

Some insects undergo a change of shape, but are hatched from the egg complete in all their parts, and only cast their skin from time to time during their growth, till they acquire the full size of their respective species. The *mouth* in some tribes is formed for gnawing or breaking the food, and operates by a pair of strong horny jaws, moving laterally, as in the beetle tribe ; while in others it is formed for suction, and consists of a sort of tube. In the butterfly and moth tribe it consists of a double tube, which, when at rest, is rolled into a spiral form, and extended at full length when in use. The *eyes* differ in the different tribes, but by far the greater part of insects are furnished with eyes apparently two in number, and situated on each side the head. The outward surface of the coats of these eyes may be com-

* The Linnæan term *pupa* was given from the indistinct resemblance which many insects bear in this state to a doll, or a child when swathed up according to the old fashion.

pared to so many convex lenses or glasses. The head of the *libellula*, or common dragon-fly, is furnished with 25,000 of these diminutive lenses! In *spiders* the eyes are from six to eight in number, of a simple structure, and placed at a considerable distance from each other.

The *muscles*, or organs constituting the several portions of the flesh in insects, are far more numerous than in the larger animals, and are extremely sensible or irritable. In the human body the muscles scarcely exceed 500, but in a large caterpillar more than 4000 have been discovered! The power of the muscles is also much greater than in animals. A flea is capable of springing at least 200 times its own length; whereas the jerboa and kangaroo, in their most powerful springs, fall very short of the same proportional distance. Insects are divided into seven orders: *coleoptera*, *hemiptera*, *lepidoptera*, *neuroptera*, *hymenoptera*, *diptera*, and *aptera*.

Order 1.—COLEOPTERA, or insects which have a hollow horny case, under which the wings are folded, when not in use. The genera are, 1. *Scarabæus*, beetles. 2. *Lucanus*, stag-beetle. 3. *Dermestès*. 4. *Coccinella*, lady-bird. 5. *Curculio*, weevil. 6. *Lampyris*, glow-worm. 7. *Meloe*, Spanish-fly. 8. *Staphylinus*. 9. *Forficula*, ear-wig.

Order 2.—HEMIPTERA, or half-winged insects. In this order the wing-sheaths are tough or leathery at their upper part, and soft or membranaceous at the lower; and the real or under wings are often of great size, and pleated longitudinally in the manner of a fan. The genera are, 1. *Blatta*, cock-roach. 2. *Gryllus*, locust, grasshopper. 3. *Fulgora*, lantern-fly. 4. *Cimex*, bug, &c.

Order 3.—LEPIDOPTERA, or scaly-winged insects. The powder or down on the wings of these insects has been considered as composed of a kind of feathers; but in reality it is composed of a kind of very minute scales, which differ in size and form in the different species, as well as on different parts of the same species. The genera are, 1. *Papilio*, butterfly. 2, 3. *Sphinx* and *Phalæna*, moths.

Order 4.—NEUROPTERA, or nerve-winged, or fibre-winged insects. This order consists of such as have four large wings, furnished with very conspicuous nerves, fibres,

or ramifications dispersed over the whole wing. The genera are, 1. *Libellula*, dragon-fly. 2. *Ephemera*, may-fly, or trout-fly, &c.

Order 5.—HYMENOPTERA, or insects having four wings, but not fibrous like the former order. They generally possess a sting or piercer, which in some is innocent; but in others it is calculated for a discharge of a highly acrimonious or poisonous juice, as in wasps and bees. The genera are, 1. *Vespa*, wasp, hornet. 2. *Apis*, bee. 3. *Formica*, ant. 4. *Termes*, white ant. 5. *Ichneumon*, &c.

Order 6.—DIPTERA consists of insects with two wings only, as the whole race of flies strictly so called, as well as gnats, and a great variety of other insects. The genera are 1. *Æstrus*, gad fly.* 2. *Musca*, common flies. 3. *Culex*, gnat, mosquito. 4. *Hippobosca*, horse-leech, &c.

Order 7.—APTERA, or insects without wings. The genera are, 1. *Podura*, spring-tail. 2. *Pediculus*, louse. 3. *Pulex*, flea, chigger. 4. *Acarus*, tick, mite. 5. *Aranea*, spiders. 6. *Scorpio*, scorpion. 7. *Cancer*, crab, lobster, craw-fish, shrimp. 8. *Monoculus*, water-flea.† 9. *Oniscus*, wood-louse. 10. *Scolopendra*, centipede.

CLASS 6. —WORMS AND ZOOPHYTES.

This last class, *vermes*, is divided by Linnæus into *mollusca*, *vermes*, *zoophyta*, and *animalcula infusoria*: or, soft-bodied animals, plant-animals, worms, and animalcules of infusions. Nearly all the animals of the class *vermes* have but slow locomotive powers. Many of them have arterial and venous vessels, in which the blood undergoes a real circulation: but these are by no means common to the whole class. In some of them eyes and ears are very per-

* In this genus the eggs are laid by the parent in the skin of the backs of cattle, in one species; in others, in the nostrils and other parts of deer and sheep; the *larvæ*, when arrived at their full size, creep out, and retiring beneath the surface of the grass, or under any convenient body, change into a chrysalis, from which in a certain space, springs the animal in its ultimate form.

† The two genera *cancer* and *monoculus* are *crustaceans*, or have a hard shelly covering. The crabs and lobsters cast their skins annually, the body shrinking before the change, and enabling them easily to draw out their limbs from the shell. The larger kind of crabs possess the extraordinary power of *casting off* at pleasure any limb, which may be accidentally maimed or bruised, and a new limb is gradually formed.

ceptible, whilst others seem to enjoy only the senses of taste and touch, which are never wanting. Many have no distinct head, and most of them are without feet. The whole of these creatures are very tenacious of life. In most of them parts that have been destroyed will afterwards be reproduced.

1. The **MOLLUSCA** derive their name from the soft fleshy nature of their body. This class includes those pulpy animals which may either be destitute of an external covering, when they are called *mollusca nuda*, as the slug; or may be inclosed in one or more shells, as the snail, oyster, &c. when they are termed *testacea*.

Mollusca nuda are those soft bodied animals which are destitute of any truly shelly, or very hard integument; though some particular genera have a coriaceous or leathery covering. Most of them are furnished with *tentacula* or feelers. The principal genera are, 1. *Limax*, slug. 2. *Aplysia*, a marine worm. 3. *Doris*, sea snail. 4. *Nereis*. 5. *Terebella*. 6. *Pyrosoma*. 7. *Nais*. 8. *Sepia*, cuttlefish.* 9. *Calamary*, *Loligo*, pen-fish or ink-fish. 10. *Medusa*, sea-blubber, sea-nettles. 11. *Holothuria*. 12. *Actinia*, sea-anemone. 13. *Asterias*, star-fish. 14. *Echinus*, sea-urchin.

Mollusca testacea, or soft-bodied animals furnished with shells, are divided into three assortments, called univalves, bivalves, and multivalves, meaning that the shelly cover consists, either of one, two, or several parts or valves. A *univalve* shell may be exemplified by that of the common *snail*; for the shell is simple or undivided. A *oivalve* shell may be exemplified by a *muscle* in which, as every one knows, the shell is composed of two pieces or valves; and lastly a *multivalve* shell may be exemplified by any species of *lepas* or *bernacle*, in which the shelly covering of the animal is formed of several pieces or divisions. The shell-animals are produced from eggs, which in some species are gelatinous, or gluey; and in others, covered with a hard or calcareous shell; and the young animal emerges from the egg with its shell on its back. The most familiar and convincing proof of this may be obtained by observing the evolution or hatching of the eggs of the common garden

* The well known Chinese preparation called *Indian-ink* is supposed to be no other than the black liquor found in the body of this fish, carefully managed, perfumed, and formed into ornamental cakes. The eggs of this fish, of the size of small filberts, and of a black colour, are frequently seen on the sea-shore, and are popularly termed *sea-grapes*.

snail, as well as of several of the water snails, which deposit eggs so transparent, that the motions of the young, with the shell on its back, may be very distinctly seen several days before the period of hatching.

All the shell animals are of such a constitution as perpetually to secrete or exude from their bodies a viscid moisture, and it is with this, managed according to the exigencies of the animal, that the shell is, throughout life, increased in dimensions, and repaired when accidentally broken in any particular part. The *growth of shells* proceeds from the edges of the mouth or opening, and thus the spires or turns of the *univalve* shells, are gradually increased in number and size, till the animal has arrived at its full growth. The *bivalves* are increased in a similar manner by the gradual enlargement of the outline of each valve.

The principal genera in the UNIVALVES are, 1. *Argonauta*.* 2. *Nautilus*, pearly-nautilus. 3. *Helix*, snail. 4. *Dentalium*, tooth fish. 5. *Scipula*. 6. *Teredo*, ship-worm. 7. *Sabella*. 8. *Patella*, limpet.

BIVALVES. 1. *Anomia*. 2. *Pinna*. 3. *Mytilus*, muscle and mother-of-pearl shell. 4. *Mya*, pearl-shell. 5. *Spondylus*. 6. *Chama*, clamp-shell. 7. *Solen*, razor-shell. 8. *Ostrea*, oyster.† 9. *Cardium*, cockle.

MULTIVALVES. 1. *Pholas*. 2. *Chiton*. 3. *Lepas*, bernacle-shell.

2. VERMES, or worms. Their forms are various and their natures extraordinary. The major part of them are the inhabitants of living animal bodies, their introduction into which is one of those inscrutable mysteries which must forever evade the power of human intellect. They exist in most animals; some kinds in the intestines, and some in the other viscera. The *external* worms possess an elongated body composed of rings; have circulating vessels, but no

* This animal, known to shell-collectors by the name of the *paper-nautilus*, is supposed to have given to man the first idea of navigation. When it means to sail, it discharges a quantity of water from its shell, by which it is rendered lighter than the surrounding medium, and of course rises to the surface. Here it extends two of its arms upward, which are each furnished at their extremity with an oval membrane, that serves as a sail. The other six arms hang over the sides of the shell, and supply the place either of oars or rudder. It is an inhabitant of the Mediterranean and Atlantic Seas.

† Oysters breathe by means of gills. They draw the water in at their mouth, a small opening in the upper part of their body, drive it down a long canal, that constitutes the base of the gills, and so out again, retaining the air for the necessary functions of the body.

heart. No nerves have been discovered in the intestinal worms.

Order 1.—INTESTINI, or intestinal worms, inhabiting the bodies of animals.—The genera are, 1. *Gordius*, guinea-worm. 2. *Ascaris*, thread-worm, round worm. 3. *Tricocephalus*. 4. *Fasciola*, fluke. 5. *Tania*, tape-worm. 6. *Hydatus*, hydatid.

Order 2.—EXTERNI, or external worms. The genera are, 1. *Aphrodite*, sea-mouse. 2. *Sipunculus*. 3. *Hirudo*, leech. 4. *Planaria*. 5. *Lumbricus*, earth-worm. 6. *Furia*.

3. **ZOOPHYTA**, zoophytes, or plant animals, seem to hold a middle station between animals and vegetables. Most of them deprived of locomotion, are fixed by stems that take root in the crevices of rocks, among sand or in other situations. The genus *hydra* or polype first deserves our notice. These curious animals are found adhering to the stems of aquatic plants, or to the under surfaces of the leaves. The species are multiplied by vegetation, one or two, or even more young ones, emerging gradually from the sides of the parent animal; and these young are frequently again prolific, so that it is not uncommon to see two or three generations at once in the same polype. But the most curious particular respecting this animal is its *multiplication by dissection*. It may be cut in every direction, and even into very minute divisions, and not only the parent stock will remain uninjured, but *every section will become a perfect animal*. Even when turned inside out, it suffers no material injury, for in this state it will soon begin to take food, and to perform all its other animal functions. When one polype is introduced by the tail into another's body, the two heads unite and form one individual.

The hard or horny zoophytes are known by the name of *corals*, and are equally of an animal nature with the polype. The whole coral continuing to grow as an *animal*, and to form by secretion the strong or stony part of the coral, which at once may be considered as its bone and its habitation, and which it has no power of leaving.* Some of the

* However insignificant the fabrications of these animals may appear to the unobserving part of mankind, it should be remembered that it is to the accumulated myriads of them that we owe part of the island on which we live; our hills are in many places full of them, and some rocks are entirely of their

coral tribe have their animal part approaching more to that of a medusa than of a polype. Of this kind are those numerous corals known by the name of *madrepores*. The smaller cords are termed *corallines*, or sea-mosses ; and are actually so many ramified sea-polypes, covered with a horny case, to defend them from the injuries which they would otherwise be liable to, in the boisterous elements in which they are destined to reside. The principal genera of the *corallines* are, 1. *Sertularia*. 2. *Tubularia*. 3. *Flustra*. Those of the *corals* are, 1. *Gorgonia*, Venus' fan. 2. *Isis*. 3. *Madrepora*. 4. *Millepora*. 5. *Tubipora*.

4. ANIMALCULA INFUSORIA, or animalcules found in different liquids. These minute beings are principally to be observed by the aid of the microscope, in such fluids as have had any animal or vegetable substance infused in them. The ancients were totally unacquainted with this class of beings. To them, the mite was made the *ne plus ultra*, or utmost bound of animal minuteness ; but the moderns, assisted by that powerful instrument the microscope, have discovered whole tribes of animals, compared with which even mites may be considered as a kind of elephants. The principal genera are,

1. *Vorticella*. The *vorticella convallaria*, is a beautiful transparent animalcule, formed like a bell-shaped flower, and furnished with a long tail or stem, by which it generally affixes itself to the stems and under-surface of the common *lemna minor*, or duckweed. The *vorticella racemosa* is still more elegant. It is found in clear stagnant waters during the summer months, attached to the stalks of the smaller water-plants. If submitted to the examination of the microscope, several small ramifications will be perceived to issue from a single stem, each terminated by an apparent flower, like that of a convulvulus. The whole is in the highest degree transparent, and the alternate expansion and contraction of the seeming flowers, forms a highly curious and interesting spectacle. The *vorticella rotatoria*, or wheel animal, so named from the apparent rapid motion of the head, is remarkable for its strange power of restoration to life and motion, after being dried many months in a glass.

2. *Cercaria*. The *cercaria mutabilis*, or changeable cercaria,

formation. New islands have been formed within the memory of many now living ; and many seas are becoming every year more difficult to navigate, being nearly choked up by the habitations of animals almost too small for human perception.

is the cause of that fine deep green scum which appears on the surface of stagnant waters during the summer months.

3. *Trichoda*. The *trichoda sol* is a globe or ball beset on all sides with very long diverging rays, having the appearance of a sun. It is about the size of a small pin's head, and is generally affixed to the stem of some small water-plant. This animalcule may be pulled or torn in pieces, by means of a pair of needles or other convenient instruments, and in the space of a single hour, each piece will be apparently complete, and perfectly globular like the original.

4. *Volvox*. The *volvox globator* often equals the size of a pin's head. In the advanced state of spring, and again in autumn, it appears in immense numbers in the clearer kinds of stagnant waters. Its motions are irregular, in all directions and at the same time rolling or spinning as if on an axis.

5. The *vibrio* is the largest of all the animalcular tribe. One species of the *vibrio anguillula*, or eel-vibrio, inhabits acid paste; when full grown, it measures the tenth of an inch in length. It is viviparous, and frequently produces a tribe of young.* Its general appearance when magnified is that of an eel.† The other species may be sometimes found in vinegar.

6, 7. *Cyclidium* and *Monas* are exceedingly small; a species called the *monas termo*, when surveyed by the utmost powers of the microscope, still appears but as a kind of moving point, having merely a sensible diameter.

A countless swarm of animalcules will always appear in any vegetable infusion, after the space of a few days; as in infusions of hay, beans, wheat, and other substances. The bluish appearance on the surface of plums, grapes, and many other fruits, is not "a living world," but a mere vegetable efflorescence, which regularly takes place on such kind of fruit.

VEGETABLE KINGDOM.

Vegetables are organized, supported by air and food, endowed with life, and subject to death, as well as animals.

* If one of them be cut through the middle, several young ones coiled up and inclosed each in a membrane will be seen to proceed from the wound. More than 100 young have issued from a single parent.

† Mr. Baker, the celebrated microscopic observer, with an instrument of highly magnifying powers, saw these eels an inch and a half in diameter, and of a proportionate length. They swam up and down very briskly; the motion of their intestines was very visible; when the water died up, they died in apparent agonies, and their mouths opened very wide.

They have in some instances, spontaneous, though we know not that they have voluntary, motion. They are sensible to the action of nourishment, air, and light, and either thrive or languish, according to the wholesome or hurtful application of these stimulants. This is evident to all who have ever seen a plant growing in a climate, soil, or situation, not suitable to it. Those who have ever gathered a rose, know but too well how soon it withers; and the familiar application of its fate to that of human life and beauty is not more striking to the imagination than philosophically and literally true. The history of the vegetable kingdom is termed **BOTANY**, a study which includes the practical discrimination, methodical arrangement, and systematic nomenclature of vegetables.

The external covering of plants, the *epidermis*, or cuticle, is commonly transparent and smooth; sometimes it is hairy or downy, and sometimes of so hard a nature that even flint has been detected in its composition. The *equisetum hyemale*, or Dutch rush, serves as a file to polish wood, ivory, and even brass. Under the cuticle is found the *cellular integument*, which is analogous to the rete mucosum of animals; it is, like that, of a pulpy texture, and the seat of colour. It is commonly green in the leaves and stems, and is dependent for its hue on the action of light. When the cellular integument is removed the *bark* presents itself, which in plants or branches only one year old consists of a simple layer. In the branches and stems of trees it consists of as many layers as they are years old. The uses of bark are familiar to us. The Peruvian bark affords "a cooling draught to the fevered lip;" while that of the cinnamon yields a rich cordial; and that which is stripped from the oak is used for the purposes of tanning. Immediately under the bark is situated the *wood*, which forms the great bulk of trees and shrubs. This also consists of numerous layers, as may be observed in the fir and many other trees, and from these concentric circles or rings, the age of the tree may be determined. Within the centre of the wood is the *medulla* or pith, which is a cellular substance, juicy when young, extending from the roots to the summits of the branches. In some plants, as in grasses, it is hollow, merely lining the stem. In describing the characters of plants we shall treat of their root, buds, trunk, leaves, props, inflorescence, fructification, and classification.

ROOTS.

Roots are necessary to plants, to fix and hold them in the earth, from which they imbibe nourishment. Roots are either *annual*, or living for one season, as in barley; *biennial*, which survive one winter, and after perfecting their seed perish at the end of the following summer, as wheat; or *perennial*, which remain and produce blossoms for an indefinite number of years, as those of trees and shrubs in general. The root consists of two parts, the *caudex* and the *radicula*. The *caudex*, or stump, is the body or knob of the root, from which the trunk and branches ascend, and the fibrous roots descend. The *radicula* is the fibrous part of the root branching from the *caudex*. Roots are,

1. *Fibrous*, or consisting entirely of fibres, as in many grasses and herbaceous plants.

2. *Creeping*, or having a subterraneous stem, spreading horizontally in the ground, throwing out numerous fibres, as in mint and couch-grass.

3. *Spindle-shaped*, as in the radish and carrot, which produce numerous fibres for the absorption of nutriment.

4. *Stumped*, or apparently bitten off, as in the primrose.

5. *Tuberous*, or knobbed, as in the potatoe, which consists of fleshy knobs, connected by common stalks or fibres.

6. *Bulbous*, as in the crocus.

7. *Granulated*, or having a cluster of little bulbs or scales connected by a common fibre, as in the saxifrage.

BUDS.

These are, in most instances, guarded by scales, and furnished with gum, or woolliness, as an additional defence. Buds are various in their forms, but very uniform in the same species, or even genus. They enfold the embryo plant.

TRUNK.

The trunk of trees includes the stems or stalks, which are of seven kinds. The stem, as it advances in growth, is either able to support itself, or twines round other bodies. It is either simple, as in the lily, or branched, as in other plants. The parts are,

1. *Caulis*, the stem, which bears both leaves and flowers, as the trunks and branches of all trees and shrubs as well as of many herbaceous plants.

2. *Culmus*, a straw or culm. the peculiar stem of grasses, rushes, and similar plants.

3. *Scapus*, or stalk, springs immediately from the root, bearing flowers and fruit, but not leaves, as in the primrose or cowslip.

4. *Pedunculus*, the flower-stalk, springs from the stem or branches, bearing flowers and fruit, but not leaves.

5. *Petiolus*, the foot-stalk, is applied exclusively to the stalk of a leaf.

LEAVES.

These are generally so formed as to present a large surface to the atmosphere. When they are of any other hue than green, they are said, in botanical language, to be *coloured*. The internal surface of a leaf is highly vascular and pulpy, and is clothed with a cuticle very various in different plants; but its pores are always so constructed as to admit of the requisite evaporation or absorption of moisture, as well as to admit and give out air. Light also acts through this cuticle, in a different manner. The effect of moisture must have been observed by every one. By absorption from the atmosphere, the leaves are refreshed; but, by evaporation, especially when separated from their stalks, they soon fade and wither. The nutritious juices, imbibed from the earth and become *sap*, are carried by appropriate vessels into the substance of the leaves, and these juices are returned from each leaf, not into the wood again, but into the bark.* The sap is carried into the leaves for the purpose of being acted upon by air and light, with the assistance of heat and moisture. By all these agents, a most material change is wrought in the component parts of the sap, according to the nature of the secretions which are elaborated, whether resinous, oily, mucilaginous, saccharine, bitter, acrid, or alkaline. The green colour of the leaves is almost entirely owing to the action of light, as was before observed. Leaves are subject to a sort of disease by which they become partially spotted or streaked, as with white or yellow, and in this state are termed *variegated*. The irritable nature of leaves is very extraordinary. The *mimosa pudica* or sensitive plant, common in hot-houses, when touched by any extraneous body, folds up its leaves one after another, while their foot-stalks droop, as if dying.

* This is effected by a double set of vessels, analogous to the arteries and veins in animals, and is the circulation of the vegetable blood or sap.

PROPS.

These are, 1. *Stipula*, a leafy appendage to the true leaves or to their stalks, for the most part in pairs.

2. *Bractea*, a leafy appendage to the flower or its stalk, very conspicuous in the lime-tree.

3. *Spina*, a thorn, proceeds from the wood itself, as in the wild pear-tree, which loses its thorns by cultivation.

4. *Aculeus*, a prickle, proceeds from the bark only, as in the rose and bramble.

5. *Cirrus*, a tendril or clasper, is a support for weak stems, and enables them to climb rocks, or the trunks of lofty trees.

6. *Glandula*, a gland, is a small tumour secreting a sweet, resinous, or fragrant liquor, as on the calyx, or cup of the moss-rose, and the foot-stalks of passion-flowers.

7. *Pilas*, a hair, which includes all the various kinds of pubescence; bristles, wool, &c. some of which discharge a poison, as in the nettle; causing great irritation whenever they are so touched, that their points may wound the skin.

INFLORESCENCE.

Inflorescence, or the different kinds or modes of flowering are, 1. *Verticillus*, a whorl, in which the flowers surround the stem in a garland or ring, as in the mints, dead nettle, &c.

2. *Racemus*, a cluster, bears several flowers each on its own stalk, like a bunch of currants.

3. *Spica*, a spike, is composed of numerous crowded flowers, ranged along an upright, common stalk, expanding progressively, as in wheat and barley.

4. *Corymbus*, a corymb, is a flat-topped spike as in the cabbage and wall-flower.

5. *Fasciculus*, a close bundle of flowers, as in the sweet-william.

6. *Capitulum*, a head or tuft, as in the globe amaranthus and thrift.

7. *Umbella*, an umbel, consists of several stalks, called rays, spreading like an umbrella, as in parsley, carrot, and hemlock.

8. *Cyma*, a cyme or stalks springing from a common centre, and afterwards irregularly subdivided, as in the laurus-tinus and elder.

9. *Paniculus*, panicle, a loose subdivided bunch of flowers, as in the oat.

10. *Thyrus*, a bunch, is a very dense particle inclining to an oval figure, as in the lilac.

FRUCTIFICATION.

Under this term are comprehended not only the parts of the fruit, but also those of the flower, which last are indispensable for bringing the former to perfection. The parts of fructification are,

1. *Calyx*, a flower-cup, or external covering of the flower: to which belong the perianthium; involucre; amentum or cat-kin; spatha, or sheath; gluma, or husk; perichæcium or scaly sheath: and volva the wrapper.

2. *Corolla*, is situated within the calyx, and consists in general of the coloured leaves of a flower;—the petalum, or petal, and the nectarium, or nectary, belong to the corolla.

3. *Stamina*, the stamens, are various in number, in different flowers, and are situated within side of the corolla. The stamen consists of a filamentum or filament, and the anthera or anther. The cells of the latter contain the pollen or fecundating dust.

4. *Pistilla*, the pistils stand in the centre of the circle formed by the stamens, and consist of the germen or rudiments of the future fruit or seed; the stile, which elevates the stigma; and the stigma which is destined to receive the pollen.

4. *Pericarpium*, the seed-vessel is formed from the germen enlarged, and is of the following kinds; a capsula or capsule; siliqua or pod; legumen or legume, the fruit of the pea-kind; drupa, stone-fruit; pomum, an apple; bacca, a berry: and strobilus, a cone.

6. *Semina*, the seeds are composed of the embryo or germ, called by Linnæus, corculum or little heart; the cotyledones, or seed-lobes almost universally two in number; albumen, the white vitellus, the yolk; testa, the skin; and hilum, the scar. Seeds are often accompanied by appendages or accessory parts; as, pellicula, the pellicle; arillus, the tunic; pappus, the seed-down; cauda, a tail; rostrum, a beak.*

7. *Receptaculum*, the receptacle, is the base which receives the other parts of the fructification. It is *proper* when it supports the parts of a single fructification only,

* To these may be added various spines, hooks, scales, and crests, generally serving to attach such seeds as are furnished with them to the rough coats of animals, and thus promote their dispersion.

when it is a base to which only the parts of the flower are joined, and not the germen, it is called a receptacle of the flower, in which case the germen being placed below the receptacle of the flower, has a base of its own, which is called the receptacle of the fruit; and it is called a receptacle of the seeds, when it is a base to which the seeds are fastened within the pericarpium. It is termed *common* when it supports a head of flowers.

CLASSIFICATION.

The system of Linnæus, now generally acknowledged and adopted, is founded on the number, situation, and proportion of the *stamens* and *pistils*, whose uses and structure have been just explained. The following twenty-four classes owe their distinctions principally to the stamens:

1. *Monandria*, one stamen. 2. *Diandria*, two stamina. 3. *Triandria*, three. 4. *Tetrandria*, four. 5. *Pentandria*, five. 6. *Hexandria*, six. 7. *Heptandria*, seven. 8. *Octandria*, eight. 9. *Enneandria*, nine. 10. *Decandria*, ten. 11. *Dodecandria*, twelve. 12. *Icosandria*, twenty or more stamina, inserted into the calyx. 13. *Polyandria*, all above twenty inserted into the receptacle. 14. *Didynamia*, four stamina, two long and two short. 15. *Tetradynamia*, six stamina, four long and two short. 16. *Monadelphica*, the stamina united into one body by the filaments. 17. *Deadelphica*, the stamina united into two bodies by the filaments. 18. *Polyadelphia*, the stamina united into three or more bodies by the filaments. 19. *Syngenesia*, anthers united into a tube. 20. *Gynandria*, stamens inserted either upon the stile or germen. 21. *Monoecia*, stamens and pistils, in separate flowers, but on the same plant. 22. *Dioccia*, stamens and pistils, like the former in separate flowers, but on two separate plants. 23. *Polygamia*, stamens and pistils, separate in some flowers, united in others, either on one, two, or three distinct plants. 24. *Cryptogamia*, stamens and pistils, either not well ascertained, or not to be numbered with certainty. The *orders*, or subdivisions of the classes, are generally marked by the number of the pistils, or by some other circumstances equally intelligible. The names of these, as well as of the classes, are both of Greek derivation, and designate the functions of the respective organs.

The student in botany has a rich source of innocent pleasure. He would find himself, says Dr. Smith, neither solitary nor desolate, had he no other companion than a

"mountain daisy," that "modest crimson-tipped flower," so sweetly sung by one of nature's own poets. The humblest weed or moss will ever afford him something to examine or illustrate, and a great deal to admire. Introduce him to the magnificence of a tropical forest, the enamelled meadows of the Alps, or the wonders of New Holland, and his thoughts will not dwell much upon riches or literary honours. Whether (adds the same author) we scrutinize the damp recesses of woods in the wintry months, when the numerous tribe of *mosses* are displaying their minute, but highly interesting structure; whether we walk forth in the early spring, when the ruby tips of the *hawthorn* bush give the first sign of its approaching vegetation, or a little after, when the *violet* welcomes us with its scent, and the *primrose* with its beauty; we shall always find something to study and admire in their characters. The yellow blossoms of the morning, that fold up their delicate leaves as the day advances—others that court and sustain the full blaze of noon—and the pale night-scented tribe, which expand and diffuse their sweet fragrance towards evening—all have peculiar charms. The more we study the works of the Creator, the more wisdom, beauty, and harmony, become manifest, even to our limited apprehensions, and while we admire, it is impossible not to adore.

MINERAL KINGDOM.

The name of *mineral*, in the strict sense of the word, denotes only such substances as are found in mines, but the term is generally applied in a more extended sense to characterize that class of inorganic and inanimate bodies, which form the solid mass, or rather the external covering, of the globe we inhabit—so far at least as the labour of man has hitherto penetrated. To the whole of these substances is given the appellation of mineral kingdom, in opposition to the two other grand divisions of nature already considered.

Minerals, like organised bodies, have a certain origin, progressively increase, and are subject to dissolution or decomposition of parts. But they arise merely by an accumulation of homogeneous, or similar particles from *without*, either by substances combining in consequence of their attractive power, which is called *cohesion*, or by the solid particles being separated from the fluid ones, when the former attract each other, according to certain laws, constituting together a solid body, and this is termed *crystallization*, a

form of which only certain minerals are susceptible. Most metals, however, are supposed to derive their origin from the contact or accumulation of mineral or subterraneous fumes and vapours; because the latter, which float in mines and metallic veins, at length penetrate into the particular fossil exposed to their action, and produce *ore*; or they combine, each according to their peculiar species, and afford native metal. Minerals increase in bulk only while they remain undisturbed in their natural situation; but by exposing them to the air for a sufficient length of time, they are decomposed or crumble to pieces, without strictly decaying as in organized bodies.

Mineralogy is that department of the science of nature which makes us acquainted with the characters of minerals. It teaches the art of distinguishing them by accurate and well defined characters; the mode of describing them with so much precision as is sufficient to recognise them with facility whenever they occur, and the art of arranging or classing them in a certain order or system: Minerals are generally arranged under four classes: earthy, saline, inflammable, and metallic.

1. The *earthy* minerals compose the greater part of the crust of the earth, and generally form a covering to the rest. They are not remarkable for being heavy, brittle, or light coloured. They are little disposed to crystallize, are un-inflammable in a low temperature, insipid, and without much smell.

2. The *saline* minerals are commonly moderately heavy, soft, sapid, and possess some degree of transparency.

3. The *inflammable* class of minerals is light, brittle, mostly opaque, of a yellow, brown, or black colour, seldom crystallize, and never ~~fee~~ cold.

4. *Metallia* minerals are characterized by being heavy, generally opaque, tough, malleable, cold, not easily inflamed, and by exhibiting a great variety of colours, of a peculiar lustre. Under each of these classes are various genera, species, sub-species, and kinds.

Mineralogy is chiefly employed in arranging similar bodies under the same, and dissimilar bodies under different denominations, and it judges of them by external appearances or internal composition. External characters are discovered by observing the figure, colour, texture, fracture, or other properties which the different bodies present to our senses, without undergoing any material alteration. The knowledge of its internal composition is acquired

chiefly by regarding the changes produced in them by the chemical actions of other bodies. And from this knowledge is derived the economical application of minerals in agriculture, metallurgy, and the arts.

Analytical mineralogy, or the analysis of minerals, is a branch of philosophical chemistry. It teaches the art of examining minerals, not by the help of external characters, but chiefly by chemical agencies. Its views are directed to the developement of the constituent parts of minerals, the order in which they are present, their relative quantities, and the best modes of separating them. Mineral waters are found in those places where there is an abundance of iron, copper, sulphur, and pit-coal. Hence it is that their taste and effects are so different in proportion as they are more or less impregnated with the above principles. They are bitter when they spring through bitter roots, impure resin, nitre, or copper. They are cold when they proceed from rocks, or when they are impregnated with sal ammoniac, nitre, alum, &c. Fatty and bituminous substances render them oily. Sulphur mixed with acids renders them sulphureous. Many of these waters have been successfully employed in medicine, and have been termed *medicinal*.

The internal constitution of the earth is little known, but the upper crust or surface is found to be composed of different *strata*, or beds placed one above the other, which are divided into seven classes: 1. *Black earth* is composed of putrified vegetable and animal substances. 2. *Clay* is more compact than black earth, and retains water longer on its surface. 3. *Sandy earth* is hard, light, and dry: it neither retains water, nor is dissolved in it. 4. *Marle* is more mealy, less hard, and attracts moisture better. 5. *Bog*, or *moss earth*, contains a vitriolic salt, which is too acid for plants. 6. *Chalk* is dry, hard, and brittle; notwithstanding a few plants can thrive in it. 7. *Scabrous*, or *stony earth*. The smoothest stones, however bare of earth, are at least covered with moss, which is a mere vegetable production; and birch is known to grow between stones, and in clefts of rocks, and grows also to a considerable height.

YOUNG MAN'S COMPANION ;

OR,

YOUTH'S INSTRUCTOR.



PART VII.
HISTORY.

HISTORY

IT is the design of **HISTORY** to trace the progress of man from a savage state to a state of civilization, to mark the effect of laws and political regulations, and faithfully to record the wondrous revolutions which have been produced in states and empires, by the avarice and ambition of princes and rulers operating on the vices and follies of mankind.

Impartial history may properly be called the common school of mankind, equally open and useful both to high and low, to princes and subjects. It treats the greatest part of the most celebrated conquerors as the enemies of mankind, the robbers of nations; who, hurried on by a restless and blind ambition, carry desolation with them from country to country, and like an inundation or a fire, destroy every thing within the reach of their baleful influence. The student of history will see a Caligula, a Nero, and a Domitian, who were praised to excess during their lives, become the horror and execration of mankind after their deaths; while Titus, Trajan, Antoninus, and Marcus Aurelius, are still regarded as the delights of the world, for having used their power only to do good. History is to them a tribunal ~~raised~~ in their life-time, similar to that formerly erected among the Egyptians; where princes, like private men, were tried and condemned after their death, that the living might learn beforehand the sentence which would for ever be passed upon their reputation. It is history which fixes the seal of immortality upon actions truly great, and sets a mark of infamy on vices, which no after age can ever obliterate. By history mistaken merit and oppressed virtue appeal to the incorruptible tribunal of posterity, which renders them the justice their own age has sometimes refused them; and without respect of persons or the fear of a power which no longer exists, condemns the unjust abuse of authority with inexorable rigour.

There is no age nor condition which may not derive some advantage from history; and what has been said of princes and conquerors, comprehends also, in some measure, all persons in power;—ministers of state—generals of armies—officers—magistrates—governors of provinces—prelates—ecclesiastical superiors both secular and regular—fathers and mothers—masters and mistresses—in a word, all those who have authority over others. For such persons have sometimes more haughtiness, pride, and humour in a very limited station than kings in theirs, and carry their despotic disposition and arbitrary power to a greater length. History, therefore, is of great advantage, to lay down useful lessons for them all, and present them with a faithful mirror of their duties and obligations, by an unsuspected hand, and thus to render them sensible that they are all constituted for the sake of their inferiors, and not their inferiors for them. History condemns vice—tears off the mask from false virtues—lays open popular errors and prejudices—dispels the delusive charms of riches, and all the vain pomp which dazzles the imagination—and shews, by a thousand examples, that nothing is great and commendable but honour and probity. From the esteem and admiration, which the most corrupt cannot refuse to the great and good actions that history lays before them, may be deduced this important truth, that *virtue is man's real good, and alone renders him truly great and happy*. This virtue we are taught by history to revere, and to discern its beauty and brightness through the veils of poverty, adversity, obscurity, and sometimes also of disgrace and infamy: on the other hand, history inspires us with contempt and horror of vice, though clothed in purple, surrounded with splendour, and placed on a throne.

Though history may be considered as the school for princes, and for those distinguished characters whom Providence has destined to be at the heads of nations, yet those who tread the private walks of life, if they wish to be useful in their station, should not neglect to replenish their minds from this source. The pencil of history has not only delineated men in groups, but, selecting distinguished individuals, has drawn them in their just proportions; and enlivening them with the colours of nature, has exhibited a selection of striking portraits for our entertainment and instruction. In contemplating the characters of nations or of eminent persons, we seem to walk in a large gallery of family pictures, and take delight in comparing the various

from one another; and though long since carried down the tide of time, we find in them pleasing and instructive companions.

History is commonly considered as being sacred or profane.

Sacred history is the history of religion before the birth of Jesus Christ, and is to be found only in the Bible; ecclesiastical history, which is certainly a branch of sacred, treats of the establishment of the Christian religion, and comprehends the lives, characters, and conduct of those who have promoted or opposed the doctrines of our Saviour.

Profane history includes the histories of all nations which are not written by inspired writers, and is subdivided into ancient and modern.

SACRED HISTORY.

THE knowledge of sacred history is derived from the Scriptures, which teach us, that there is but one God, who is eternal, and that all things are the work of his hands. The world was created about 4004 years before the birth of Christ, and in the space of six days; when God hallowed the seventh day, and made it a day of religious rest for ever. The names of the first man and woman were Adam and Eve; who disobeying the positive command of their Maker, entailed death and misery on all their posterity. The lives of the first men were very wicked and depraved; but God punished them for their sins by a general deluge, which took place 1656 years after the creation, and 2348 before Christ; and which destroyed all mankind, except Noah and his family, who were saved in an ark built by God's command, and with them two of every kind of living creatures. Noah had three sons, Shem, Ham, and Japhet, among whom all the earth was divided. From Shem the Hebrews were descended; Ham was worshipped by the Egyptians; and the posterity of Japhet peopled the greatest part of the West.

The descendants of Noah began to disperse on the confusion of tongues, which took place at the building of the tower of Babel, as a punishment for the arrogance of men, who thought of making themselves equal with the Supreme.

The next important event which happened was the calling of Abraham, who was ordered to leave his kindred and country and go into the land of Canaan, in order that the worship of the one true God might be preserved among men, who had already become grossly corrupted. But the posterity of Abraham did not continue long in the land of Canaan, for a famine prevailing in the land, the patriarchs, the sons of Jacob, who was the grandson of Abraham, migrated with their families into Egypt, where their brother Joseph had gone before, having been sold by them out of envy. After a time the descendants of Abraham became very numerous, and this exciting the jealousy of the rulers of the country, orders were given to destroy every male among them at its birth; but Moses being providentially saved by the daughter of Pharaoh, and brought up in all the learning of Egypt, was commissioned by God to bring his people out of bondage, and reinstate them in the land of Canaan. There "with mighty power and with a stretched out arm" God delivered the Israelites by the hand of his servant Moses, who by the same divine authority gave them laws and ordinances; and this, which was called the Mosaic dispensation, was to continue till it was set aside by the Christian, or the appearance of Christ in the flesh.

Though the Jews frequently fell into idolatry, a portion among them always preserved the sublime truths that had been delivered to their forefathers; and a magnificent temple was erected at Jerusalem by Solomon, one of the kings of the Jews, in which the holy ceremonies were performed, by a distinct order of priests, the posterity of Aaron, who were set apart for the service of God.

The Jews were indeed a favoured people, for though they often provoked God, he did not leave them without a witness of himself, sending them a succession of prophets, who foretold remote events, and announced in terms at first mysterious, but gradually more clear, the future birth of a Messiah, who was to give them a new and more perfect law, and to abolish the rites and ceremonies established by Moses. This was to take place after the tribe of Judah had lost its authority, and the nation had become subject to the Romans; and it accordingly did take place in the reign of Augustus, and during a period of profound peace, a proper season for the "Prince of Peace" to appear. But though every circumstance attending this Divine Personage, who was God and man, was truly miraculous—and though the

men in general seem to have paid little regard to his appearance.

The public life of Jesus Christ commenced about his thirtieth year; at this age he entered on his ministry, which lasted only to his thirty-third year.

He first chose twelve disciples from among the most humble and ignorant of the people, who accompanied him in his labours of love, and imbibed the doctrines which he taught; namely, that all Scripture was given by inspiration of God; that there were three persons in one God; that he was the true Son of God; that he came to call sinners to repentance; that the dead must rise again, and be judged according to the works done in the body; and that they who believe in his Name, and obey his precepts, *shall* be everlastingly happy. In a word, the purity of his life corresponded with the purity of his doctrine; and at last he sealed his testimony with his blood.

On the third day he rose again, and after a stay of forty days on earth, during which he several times conversed with his apostles, instructing them how to act, he ascended into heaven, and now sitteth at the right hand of God, "making intercession for us."

The apostles after his ascension having received the Holy Ghost, dispersed abroad to spread the Gospel of Christ; and by miracles confirmed the truth of their mission. The religion of Jesus thus rapidly spread over the world, and ten persecutions only served to establish it deeper in the hearts of mankind.

ANCIENT HISTORY.

EGYPT.

THE first people that formed a regular government were the Egyptians, whose history goes back almost to the deluge. The first king of this country was Menes, probably the Misraim of Scripture, who is said to have been the inventor of arts, and the civilizer of a large portion of the eastern world. His first wife was Isis, long worshipped as a divinity. On his death Egypt was divided into four dynasties, Thebes, Thin, Memphis, and Tanais.

Egypt had obtained some degree of civilization under a number of petty sovereigns, called shepherd kings, but it

afterwards relapsed into barbarism, which continued until the reign of Sesostris, who united the separate principalities into one kingdom; and by policy and conquest rendered himself respected at home and abroad.

The princes of the house of Pharaoh were a long time kings of Egypt, and possessed the throne till Cambyzes, King of Persia, conquered that country, about 525 years before Christ; and under them the Egyptians^c were the most polished people in the world, and made the greatest proficiency in learning and science.

Their respect for their ancestors induced them to embalm their dead; hence the mummies still to be met with: and in order that their kings might govern wisely and justly, they sat in judgment on their lives after their death. They were great astronomers, mathematicians, and mechanics; and their immense pyramids, probably the sepulchral monuments of their kings, are still the wonder of the world.

Egypt continued under the power of Persia till the Persian empire was conquered by Alexander the Great; after whose death it again became independent under the Ptolemys; but was reduced to the state of a Roman province, on the death of Cleopatra, the wife and sister of Ptolemy Dionysius, the last king, about thirty years before the Christian era.

The Ethiopians, whose country lies beyond Egypt, are supposed to have been originally a colony of the Egyptians; but their numbers, their strength, and their ferocity, soon made and kept them independent, and insulated from the rest of the world.

ASSYRIA.

At the head of the Assyrian kings who reigned at Babylon is placed Belus, its reputed founder, and who is supposed to have been the Nimrod of the Bible.

He was succeeded by Ninus, who built Nineveh, and removed thither the seat of empire. He was the first who made war solely for the purpose of dominion. Having reduced Asia, he conquered the Bactrians, with their king Zoroaster. After this he espoused Semiramis, by whom he had a son, called Ninyas.

Semiramis was a queen of a heroic mind: disguising her sex, she took possession of the kingdom, instead of her son, enlarged Babylon, and surrounded it with a wall, which was 480 furlongs in extent.

Ninyas having slain his mother, took possession of the kingdom, which had been greatly improved by his parents. He was a very slothful sovereign, but rarely seen, and grew old in the company of his concubines.

Sardanapalus, the last of the Assyrian monarchs, was effeminate in the extreme. When Arbaces, governor of Media, beheld him sitting in the midst of his women, twirling the distaff, and spinning the purple, he was moved with indignation. He waged war against him, and reduced him to such distresses, that he burnt himself and his riches in a fit of despair, and both perished together in the flames.

After the death of Sardanapalus, the Assyrian empire was divided into three kingdoms; the Median, Assyrian, and Babylonian. The first king of the Median dynasty was Arbaces. This kingdom continued till the time of Astyages, who was subdued by Cyrus. ~~Ecbatana~~ Ecbatana was the metropolis of the Median, as Nineveh was of the Assyrian empire; the first king was Phul, succeeded by Tiglathpileser, Salmanassar, Sennacherib, and at last by Esarhaddon, who took possession of the kingdom of Babylon; but after his death the Assyrian kingdom was subjected to the Medes and Babylonians, who destroyed Nineveh. The principal city of the Babylonian kingdom was Babylon. Here also the royal residence was fixed. The most celebrated of the kings of Babylon was Nebuchadnezzar, who subdued almost the whole of the east. The last king was Darius the Mede; but he being conquered by Cyrus, King of Persia, the Babylonians submitted to the Persians. Thus, in the time of Cyrus, there arose a new monarchy called the Persian.

Nineveh, the metropolis of Assyria, is said to have been built by Assur, or Ninus, on the banks of the Tigris. The height of its walls was 100 feet, the breadth sufficient for three chariots to pass at the same time. It was 480 furlongs in compass, and was destroyed under Sardanapalus, by Arbaces or Abactus.

Babylon was built by Belus or Semiramis, but so much improved by Nebuchadnezzar, as to become one of the seven wonders of the world. It was built on both sides of the Euphrates, surrounded by a wall, on which were many towers, so extensive that six chariots might pass abreast: the height was 350 feet. There were 106 gates, all of brass, with doors and hinges, in the circuit. The city was filled with houses of three and four stories. Near the citadel were the *horti pensiles*, or hanging gardens; vaulted arches

were raised from the ground, one above another, increasing in grandeur as in height, and thus supporting the vast weight of the whole garden.

PERSIA.

This monarchy continued for more than 200 years, from Cyrus, whose reign began A. M. 3468, to Darius Codomannus; who being conquered by Alexander, the empire was transferred to the Greeks, A. M. 3674.

Cyrus, founder of the empire, was a prince who merited the highest applause. He procured the return of the Jews into their own country. Having made war with the Massagetæ, a people of Scythia, he was defeated and slain. Others report, that he died happily, and was buried with magnificence at Babylon.

Cambyses, the son of Cyrus, subdued Egypt. He succeeded to his father's kingdom, but not to his virtues; for he filled every place with blood and slaughter. He at length received accidentally a mortal wound from his own sword, which happened to be without the scabbard. Cambyses had a brother of the name of Smerdis whom he killed a little before his own death. One of the magi pretended to be this person, and ruled in his name as successor to Cambyses; the fraud, however, being detected, seven of the Persian nobles entered into a confederacy, and slew him.

The magus being slain, Darius, the son of Hystaspes, and one of the seven conspirators, obtained the kingdom by artifice. He destroyed the famous city of Babylon, and not long after undertook an expedition into Scythia, in which he was unsuccessful. In the battle of Marathon his whole army was cut off by the Athenians, under the command of Miltiades.

Xerxes, a son of Darius by Atossa, daughter of Cyrus, succeeded his father. To revenge the slaughter made by the Athenians, he marched into Greece with a prodigious army, consisting of 1,700,000 foot, and 80,000 horse; but being vanquished by Themistocles, the Athenian general, at the battle of Salamis, he was terrified, and escaped in a small fishing boat, leaving 300,000 soldiers, under the command of Mardonius, to subdue Greece. This army was entirely destroyed by the Spartan general Pausanias, at the battle of Platæ. Xerxes returning from this unhappy expedition, was despised by his own people, and at last slain

by Artabanus, one of his own guards. He was succeeded by his son *Xerxes Longianus*, who is famed for protecting the Jews, and restoring them to their own country. But during several succeeding reigns we find only turbulence and murder, till at last *Darius Codomannus* was placed on the throne by the intrigues of *Bagoas* the eunuch. This emperor being defeated by *Alexander the Great* in three battles, was deprived both of his kingdom and his life. He was the last of the kings of Persia, the dominion of which after his death was transferred to the Greeks. The kingdom of *Parthia*, which was founded by *Arsaces*, about 300 years before Christ, and which after the death of *Alexander* had extended itself over Persia, was subdued by *Trajan*; and afterwards relinquished by *Adrian*, who in the beginning of the second century, made the *Euphrates* the eastern boundary of the empire. The revolt of the *Parthians* to their dominion by *Artaxares* or *Artaxerxes*, formed the second Persian empire, which continued from the year of Christ 226, to the year 652, when the whole country was overrun by the *Arabs*. During this period there were twenty-eight kings, none of whom are particularly celebrated in history.

GREECE.

The ancient inhabitants of Greece were extremely barbarous. They are said to have been cannibals, and ignorant of the use of fire. The first dawn of civilization arose under the *Titans*, a Phenecian or Egyptian colony, who settled in the country about the time of *Moses*. These people gave the Greeks the first ideas of religion, and introduced the worship of their own gods, *Saturn*, *Jupiter*, *Ceres*, and a host of others. When the Greeks received this new system of theology, they entertained very confused ideas of it, and naturally blended its doctrines and worship with their own religions. Hence arises that partial coincidence between the Grecian and Egyptian mythologies. Succeeding ages confounded the *Titans* themselves with the gods, whence may be traced the origin of all those countless fictions, which have at once embellished and obscured the history of Greece. Superstition was a predominant characteristic of the Greeks, in the early periods. To this cause may be attributed the origin of the *Oracles*, and the institution of the public games in honour of the gods. The principal oracles were those of *Delphi* and *Dodona*.

The resort of strangers to these places, on particular occasions, led to the celebration of their *public games*. Of these the four termed *sacred* were the *Olympic*, the *Pythian*, the *Nemean*, and the *Isthmian*. They consisted chiefly in contests of skill in all the athletic exercises, and the prizes were almost entirely honorary. The effect of these games was, to promote national union, diffuse a love of glory, and train the youth to martial exercises.

The earliest annals of Greece, which can at all be depended on, commence with Inachus, the last of the Titans, who founded the kingdom of Argos, and one of his sons, Egialtes, that of Sicyon, A. C. 1856. In the following century happened the deluge of Ogyges, A. C. 1796, after which followed a period of barbarism for more than 200 years.

Cecrops, the leader of another colony from Egypt, landed in Attica, in 1582 A. C. and connecting himself with the last king, succeeded on his death to the sovereignty. He built twelve cities, and was eminent as a lawgiver and politician,

Cranaus succeeded Cecrops, in whose time happened two remarkable events, the judgment of the Areopagus between Mars and Neptune, two princes of Thessaly; and the deluge of Deucalion, which was probably a partial inundation, magnified and disguised by the poets. The Areopagus, or court of justice at Athens, was instituted by Cecrops.

Amphictyon, the cotemporary of Cranaus, instituted the Amphictyonic council. This was one general senate whose decrees all were obliged to observe and execute. From a league of twelve cities, this council became a representative assembly of the states of Greece, and had the most admirable political effects in uniting the nation, and giving it a common interest.

Cadmus, about 1519 A. C. introduced alphabetic writing into Greece, from Phenicia. The alphabet had then only sixteen letters, and the mode of writing was the very reverse of that now in use, namely, from left to right, and from right to left alternately. From this period may be dated the rapid advances towards civilization made by the Greeks.

Erectheus, or Erechthonius, probably the leader of a new Egyptian colony, cultivated the plains of Eleusis, and instituted the Eleusinian mysteries, in imitation of the Egyptian games of Isis. These mysteries were of a moral and religious nature, but the ceremonies connected with them were childish

PART VII. *or Youth's Instructor.*

Theseus laid the foundation of the grandeur of Attica, by uniting its twelve cities, and giving them a common constitution, A. C. 1257.

The Argonautic expedition was the first great military enterprise of the Greeks, A. C. 1263. It was both military and mercantile. Its object was to open the commerce of the Euxine Sea, and to secure some establishments on its coasts.

A dispute between two brothers, Eteocles and Polynices, gave rise to the Theban war, which was terminated by the deaths of both in single combat; but both this and the Argonautic expedition are involved in fable. Troy was taken after a blockade of ten years, either by storm or surprise, A. C. 1184; and being set on fire in the night, was burnt to the ground, not a vestige of its ruins existing at the present day. In these times military tactics were unknown. The soldier had no pay but his share of the booty, divided by the chiefs. The weapons of war were the sword, the bow, the javelin, the club, the hatchet, and the sling. A helmet of brass, an enormous shield, a cuirass, and buskins, were the defensive weapons.

Hercules, the son of Amphitryon, sovereign of Mycenæ, was banished from his country, with all his family, while his throne was possessed by an usurper. His descendants, after the period of a century, returned to Peloponnesus, and after subduing their enemies, took possession of the states of Mycenæ, Argos, and Lacedæmon. This happened about eighty years after the taking of Troy. A long period of civil war and bloodshed succeeded.

Though Codrus, King of Athens, devoted himself to death for his country, yet his subjects, weary of monarchy, elected his son Medon chief magistrate, with the title of Archon. Thus commenced the Athenian republic, about 1068 A. C. At this time the Greeks began to colonize. A large body of Ætolians, from Peloponnesus, founded twelve cities in the Lesser Asia, of which Smyrna was the most considerable. A troop of Ionian exiles built Ephesus, Colophon, Clazomene, and other towns, giving to their new settlements the name of Ionia. The Dorians sent off colonies to Italy and Sicily, founding in the former Tarentum and Locri, and in the latter, Syracuse and Agrigentum.

After the return of the Heraclidæ, Sparta was divided between the two sons of Aristodemus, Eurysthene, and Procles, who reigned jointly; and this double monarchy, transmitted to the descendants of each, continued in the separate branches for nearly 900 years. A radical principle

of disunion and consequent anarchy made the want of constitutional laws to be severely felt. **Lycurgus**, brother of **Polydectes**, one of the kings of **Sparta**, a man distinguished alike by his abilities and virtues, was invested, by the concurring voice of the sovereigns and people, with the important duty of reforming and new modelling the constitution of his country, 884 A. C.

Lycurgus instituted a senate, elective, of twenty-eight members, whose office was to preserve a just balance between the power of the kings and that of the people. Nothing could be proposed to the assembly of the people which had not received the previous consent of the senate; and, on the other hand, no judgment of the senate was effectual without the consent of the people.

Lycurgus paid the most particular attention to the regulation of manners: one great principle pervaded his whole system, "*Luxury is the bane of Society.*" He divided the territory into 39,000 equal portions among the whole of its free citizens. He substituted iron money for gold and silver prohibited the practice of commerce, abolished all useless arts, and allowed even those necessary to life to be practised only by slaves. The whole body of citizens made their principal repasts at public tables, at which the meals were coarse and parsimonious, but the conversation tended to improve the youth in virtue, and cultivate a patriotic spirit.

The Spartan education, while it rejected all embellishments of the understanding, nourished the severer virtues; it taught the duties of religion—obedience to the laws—respect for parents—reverence for old age—inflexible honour—undaunted courage—contempt of danger—but above all, the love of glory, and of their country.

On the abolition of the regal office, the change of the constitution of Athens was more nominal than real. The archonship was, during three centuries, a perpetual and hereditary magistracy. In 754 A. C. this office became decennial. In 648 the archons were annually elected, and were nine in number, with equal authority.

Draco, elevated to the archonship in 624 A. C. projected a reform in the constitution of his country, and thought to repress disorders by the extreme severity of his penal laws which, for this reason, are said to have been written in blood.

Solon, an illustrious Athenian, of the race of **Codrus**, attained the dignity of archon 594 A. C. and was entrusted with the care of forming for his country a new form of government, and a new system of laws. He divided the

citizens into four classes, according to the measure of their wealth. To the three first, the richer citizens, belonged all the offices of the commonwealth. The fourth, the poorer class, more numerous than all the other three, had an equal right of suffrage with them in the public assembly. To balance the weight of popular interest, Solon instituted a senate of 400 members (afterwards enlarged to 500 and 600) with whom it was necessary that every measure should originate before it was discussed in the assembly of the people.

To the court of Areopagus he committed the guardianship of the laws, and the power of enforcing them, with the supreme administration of justice; the treasures of the state, the care of religion, and a tutorial power over all the youth of the republic. The particular laws of the Athenian state deserve higher praise than its form of government. The laws relating to debtors were mild and equitable, as were those which regulated the treatment of slaves: but the absolute subjection of females to the control of their nearest relations, approached too nearly to a state of servitude. The practice of *ostracism* was iniquitous and absurd. It was a ballot of all the citizens, in which each wrote down the name of the person in his opinion most obnoxious to censure; and he who was thus marked out by the greatest number of voices, though unimpeached of any crime, was banished for ten years from his country: a practice which has stained the character of Athens with many flagrant instances of public ingratitude.

The manners of the Athenians and the Lacedæmonians formed a perfect contrast. The arts were with the former in the highest esteem; the latter despised the arts, and all who cultivated them. Peace was the natural state of Athens; Sparta was entirely a military establishment: luxury was the character of the one; frugality of the other: both nations were equally jealous of their liberty, and equally brave in war: the courage of the Spartan sprang from constitutional ferocity; the courage of the Athenian from the principle of honour.

Athens, a prey to faction and civil disorder, surrendered her liberties to Pisistratus, 550 A. C.; who established himself firmly in the sovereignty, and transmitted a peaceable crown to his sons Hippias and Hipparchus.

Hermodias and Aristogiton succeeded in restoring the democracy. Hipparchus was put to death; and Hippias being dethroned, solicited a foreign aid to place him in the

sovereignty. Darius, the son of Hystaspes, meditated at this time the conquest of Greece. Hippias took advantage of this circumstance, and Greece was now involved in a war with Persia.

The Athenians had assisted the people of Ionia in an attempt to throw off the yoke of Persia, and burnt and ravaged Sardis, the capital of Lydia. Darius speedily reduced the Ionians to submission, and then turned his arms against the Greeks, their allies; the exile Hippias prompting the expedition.

Darius began the attack both by sea and land. The first Persian fleet was wrecked in doubling the promontory of Athos; a second, of 600 sail, ravaged the Grecian islands; while an immense army, landing in Euboea, poured down with impetuosity on Attica. The Athenians met them on the plain of Marathon, and, headed by Miltiades, defeated them with great slaughter, 490 A. C. The Persians lost 6300, the Athenians 190, in this battle. The most shocking ingratitude was displayed towards Miltiades. Accused of treason for an unsuccessful attack on the Isle of Paros, his sentence of death was commuted into a fine of fifty talents, which being unable to pay, he was thrown into prison, and there died of his wounds.

Themistocles and Aristides yet sustained nobly the glory of ungrateful Athens. Darius dying, was succeeded by his son Xerxes, the heir of his father's ambition, but not of his abilities. He armed, it is said, five millions of men, for the conquest of Greece; 1200 ships of war, and 3000 ships of burden. Landing in Thessaly, he proceeded by rapid marches to Thermopylæ, a narrow defile on the *Sinus Maliacus*. The Athenians and Spartans, aided only by the Thespians, Plateans, and Æginetes, determined to withstand the invader. Leonidas, King of Sparta, was chosen to defend this important pass with 6000 men. Xerxes, after a weak attempt to corrupt him, imperiously summoned him to lay down his arms. *Let him come, said Leonidas, and take them.* For two days the Persians were repeatedly repulsed with great slaughter; but an unguarded track being at length discovered, the defence of the pass became a fruitless attempt on the part of the Greeks. Leonidas, foreseeing certain destruction, yet determining to give the Persians a just idea of the resolute spirit of their enemies, commanded all to retire but 300 of his countrymen. He, with his brave Spartans, were all cut off to a man, 480 A. C. A monument was erected on the spot, for which Simonides

the poet wrote the following noble inscription. *O stranger, tell it at Lacedæmon that we died here in obedience to her laws.*

The Persians poured down upon Attica. The inhabitants of Athens, after conveying their women and children to the islands for security, betook themselves to their fleet, abandoning the city, which the Persians pillaged and burnt. The fleet of the Greeks, consisting of 380 sail, was attacked in the Straits of Salamis by that of the Persians, amounting to 1200 ships. Xerxes himself beheld from an eminence the total discomfiture of his squadron, and then fled with precipitation across the Hellespont. A second overthrow awaited his forces by land; for Mardonius, at the head of 300,000 Persians, was totally defeated at Platæa by the combined army of the Athenians and Lacedæmonians, 479 A. C. On the same day the Greeks engaged and destroyed the remains of the Persian fleet at Mycale; at this time the national character of the Greeks was at its highest elevation.

Cimon, the son of Miltiades, after expelling the Persians from Thrace, attacked and destroyed their fleet on the coast of Pamphylia; and on the same day landing his troops, gained a signal victory over their army. Supplanted in the public favour by the art of his rival Pericles, he suffered a temporary exile, to return only to signalize himself still further in the service of his ungrateful country. He attacked and totally destroyed the Persian fleet of 300 sail; and landing in Silesia, completed his triumph by defeating 300,000 Persians, under Megabyzus, 460 A. C. Artaxerxes, the Persian king, now sued for peace, which was granted on terms most honourable to the nation.

An acquaintance with Asia, and an importation of her wealth, introduced a relish for Asiatic manners and luxuries. With the Athenians, however, this luxurious spirit was under the guidance of taste and genius; it led to the cultivation of the finer arts; and the age of Pericles, though the national glory was in its wane, is the era of the highest internal splendour and magnificence. Pericles ruled Athens with little less than arbitrary sway; and Athens pretended at this time to the command of Greece. She held the allied states in the most absolute subjection, and lavished their subsidies, bestowed for the national defence, in magnificent buildings, games, and festivals, for her own citizens.

A war waged by the Corinthians with the people of Corcyra, in which the Athenians interfered, continued for twenty-eight years, with various and alternate success.

Pericles died before its termination, a splendid ornament of his country, but a corrupter of her manners. **Alcibiades** ran a similar career, with equal talents, equal ambition, but with still less purity of moral principle. Having been capitally condemned for treason, he sold his services first to Sparta and afterwards to Persia; and finally made his peace with his country by betraying the power which protected him; returning to Athens, the idol of a populace as versatile as they were worthless.

A fatal defeat of the Athenian fleet at **Ægos Potamos**, by **Lysander**, reduced Athens to the last extremity. The **Lacedæmonians** blockading the city by sea and land, the war was terminated by the unconditional submission of the Athenians, 405, A. C.—**Lysander**, after the reduction of Athens, abolished the popular government, and substituted in its place *thirty tyrants*, whose power was absolute. The most eminent of the citizens fled from their country; but a band of patriots, headed by **Thrasybulus**, attacked, vanquished, and expelled the usurpers. The persecution and death of **Socrates**, at this time, reflected more disgrace on the Athenian name than their national humiliation.

On the death of **Darius Nothus**, his eldest son **Artaxerxes Mnemon** succeeded to the empire of Persia. His younger brother, **Cyrus**, attempted to dethrone him, and with the aid of 13,000 Greeks, engaged him near **Babylon**, but was defeated and slain. The remainder of the Grecian army 10,000 in number, under the command of the celebrated **Xenophon**, made a most masterly retreat, traversing a hostile country, in extent 1600 miles, from **Babylon** to the banks of the **Euxine**. The Greek cities of Asia had taken part with **Cyrus**. **Agésilæus**, King of Sparta, won some important battles in Greece; and a naval defeat near **Cnidus** utterly destroyed the **Lacedæmonian** fleet. The Spartans sued for peace, A. C. 387, and obtained it by sacrificing to Persia all their Asiatic colonies.

While Athens and Sparta were tending to decline, the Theban republic rose to a degree of splendour, eclipsing all its cotemporary states. The republic was divided by faction. Four hundred exiled Thebans fled to Athens for protection. Among these was **Pelopidas**, who disguising himself and friends as peasants, entered Thebes in the evening, and joining a patriotic party of the citizens, they surprised the heads of the usurpation amid the tumult of a feast, and put them all to death. **Epaminondas**, the friend of **Pelopidas**,

shared with him the glory of this enterprise ; and attacking with the aid of 5000 Athenians the Lacedæmonian garrison, drove them entirely out of the Theban territory.

A war necessarily ensued between Thebes and Sparta, in which the latter was assisted by Athens. Thebes singly opposed the power of Sparta, and the league of Greece but Epaminondas and Pelopidas were her generals ; the latter amidst a career of glory, perished in an expedition against the tyrant of Phæraæ. Epaminondas, triumphant at Leuctra and Mantinea, fell in that last engagement, and with him expired the glory of his country, 363 A. C.—Athens and Sparta were humbled at the battle of Mantinea. Thebes was victorious, but she was undone by the death of the brave Epaminondas. All parties were tired of the war ; a treaty was agreed to, in which it was stipulated that each power should retain what it possessed.

We cannot conclude this sketch of the Theban republic, without giving the following admirable character of Epaminondas, from Dr. Leland's History of Philip, King of Macedonia : “ Epaminondas was born and educated in that honest poverty, which those less corrupted ages accounted the glorious mark of integrity and virtue. The instructions of a Pythagorean philosopher, to whom he was intrusted in his earliest years, formed him to all the temperance and severity peculiar to that sect, and were received with a docility and pleasure which bespoke an ingenuous mind. Music, dancing, and all those arts which were accounted honourable distinctions at Thebes, he received from the greatest masters. In the athletic exercises he became conspicuous, but soon learned to apply particularly to those which might prepare him for the labours and occasions of a military life. His modesty and gravity rendered him ready to hear and receive instruction ; and his genius enabled him to learn and improve. A love of truth, a love of virtue, tenderness, and humanity, and an exalted patriotism he had learned, and soon displayed. To these glorious qualities he added penetration and sagacity, a happiness in improving every incident, a consummate skill in war, an unconquerable patience of toil and distress, a boldness in enterprise, vigour, and magnanimity. Thus did he become great and terrible in war ; nor was he less distinguished by the gentler virtues of peace and retirement. He had a soul capable of the most exalted and disinterested friendship. The warmth of his benevolence supplied the deficiencies of his fortune ; his credit and good offices frequently were

employed to gain that relief for the necessities of others which his own circumstances could not grant them : within the narrow sphere of these were his desires regularly confined ; no temptations could corrupt him ; no prospects of advantage could shake his integrity ; to the public he appeared unalterably and solely devoted : nor could neglect or injuries abate his zeal for Thebes. All these illustrious qualities he adorned with that eloquence which was then in such repute, and appeared in council equally eminent, equally useful, to his country, as in action. By him Thebes first rose to sovereign power, and with him she lost her greatness."

Greece was now in the most abject condition. Athens seemed to have lost all ambition ; luxury ruled without control ; poets, musicians, sculptors, and comedians, were now the only great men of Attica. Sparta, from a similar cause, was in no capacity to attempt a recovery of her former greatness. In this situation Philip, King of Macedon, formed the project of subduing the whole of Greece. He ascended the throne by popular choice, in violation of the natural right of the next heirs to the crown ; and he secured his power by the success of his arms against the Illyrians, Pæonians, and Athenians. Uniting to great military talents the most consummate artifice and address, he had his pensionaries in all the states of Greece, who directed to his advantage every public measure.

A sacrilegious attempt of the Phocians to plunder the temple of Delphos excited the *sacred war*, in which almost all the republics took a part ; and Philip's aid being courted by the Thebans and Thessalians, he commenced hostilities by invading Phocis, the key to the territory of Attica. Æschines the orator, bribed to his interest, attempted to quiet the alarms of the Athenians, by ascribing to Philip a design only of punishing sacrilege, and vindicating the cause of Apollo. Demosthenes, with true patriotism, exposed the artful designs of the invader, and with the most animated eloquence roused his countrymen to a vigorous effort for the preservation of their natural liberties ; but the event was unsuccessful.

The battle of Cheronæa, fought 337 A. C. decided the fate of Greece, and subjected all her states to the dominion of the King of Macedon. They retained their separate and independent governments, while he controlled and directed all the national measures. Philip was appointed commander in chief of the forces ; and projecting the conquest

of Persia, directed each republic to furnish its proportion of subsidies. On the eve of this great enterprise Philip was assassinated by Pausanias, a captain of his guards, in revenge of a private injury, 336 A. C.

"Thus," says an admired author, "died Philip, whose virtues and vices were directed and proportioned to his ambition. His most shining and exalted qualities were influenced in a great measure by his love of power; and even the most exceptionable parts of his conduct were principally determined by their expediency and conveniency. If he was unjust, he was, like Cæsar, unjust for the sake of empire. If he gloried in the success acquired by his virtues and his intellectual accomplishments, rather than that which the force of arms could gain, the reason which he himself assigned, points out the true principle: 'In the former case,' said he, 'the glory is entirely mine; in the other, my generals and soldiers have their share.'"

Alexander, the son of Philip, succeeded at the age of twenty to the throne of Macedon, and, after a few successful battles with the revolted states, to the command of Greece.

Alexander was determined to pursue his father's designs for the conquest of Persia. With an army of 30,000 foot and 5000 horse, the sum of 70 talents, and provisions only for a single month, he crossed the Hellespont, and in traversing Phrygia visited the tomb of Achilles. Darius Codomannus resolved to crush at once this inconsiderate youth, and met him on the banks of the Granicus with 100,000 foot and 10,000 horse. The Greeks swam the river, their king leading the van; and attacking the astonished Persians left 20,000 dead upon the field, and put to flight their whole army. Alexander now sent home his fleet, leaving to his army the sole alternative, that they must subdue Asia or perish. Prosecuting their course for some time without resistance, the Greeks were attacked by the Persians in narrow valley of Cilicia, near the town of Issus. The Persian host amounted to 400,000, but their situation was such that only a small part could come into action, and they were defeated with prodigious slaughter. The loss of the Persians was, 110,000, that of the Greeks very inconsiderable. The generosity of Alexander was displayed after the battle of Issus, in his attention his noble prisoners, the mother, the wife, and family of Darius. To the credit of Alexander it must be owed, that humanity, however overpowered, and

at times extinguished by his passions, formed a part of his natural character.

The submission of all Syria followed the battle of Issus Damascus, where Darius had deposited his chief treasures, was betrayed and given up by its governor. Alexander bent his course towards Tyre, and desired admittance to perform a sacrifice to Hercules. The Tyrians shut their gates, and maintained for seven months a noble defence. The city was at length taken by storm, and the victor glutted his revenge by the inhuman massacre of 8000 of the inhabitants. The fate of Gaza, gloriously defended by Betis, was equally deplorable to its citizens, and more disgraceful to the conqueror; ten thousand of the former were sold into slavery, and its brave defender dragged at the wheels of the victor's chariot.

The taking of Gaza opened Egypt to Alexander, and the whole country submitted without opposition. Amidst the most incredible fatigues, he led his army through the deserts of Lybia, to visit the temple of his pretended father, Jupiter Ammon. On his return he built Alexandria at the mouth of the Nile, afterwards the capital of Lower Egypt, and one of the most flourishing cities in the world. Twenty other cities of the same name were reared by him in the course of his conquest.

Returning from Egypt, Alexander traversed Assyria, and was met at Arbela by Darius, at the head of 700,000 men. Peace, on very advantageous terms, was offered by the Persians, but was haughtily rejected. The Persians were defeated at Arbela, with the loss of 300,000 men, and Darius fled from province to province. At length betrayed by Bessus, one of his own satraps, he was cruelly murdered; and the Persian empire submitted to the conqueror, 330 A. C.

Alexander, firmly persuaded that the sovereignty of the whole habitable globe had been decreed him, now projected the conquest of India. He penetrated to the Ganges, and would have proceeded to the Eastern Ocean had the spirit of his army kept pace with his ambition. But his troops, seeing no end to their toils, refused to proceed. Indignant that he had found a limit to his conquests, he abandoned himself to every excess of luxury and debauchery. The arrogance of his nature, and the ardour of his passions, heightened by continual intemperance, broke out into the most outrageous excesses of cruelty. Having drunk immoderately at a banquet, he sunk senseless upon the floor, and

died at Babylon, in the thirty third year of his age and the thirteenth of his reign, A. C. 324.

By the death of Alexander were fulfilled many of the prophécies of the sacred writers. One of them is singularly striking; "The temple of Belus shall be broken down unto the ground never to rise from its ruins." That the word of God might prevail, Alexander is cut off, at the very instant he is preparing to rebuild that temple, and to restore Babylon to its wonted splendour.

In Alexander we shall find little to admire, and less to imitate. That courage for which he was celebrated was but a subordinate virtue—that fortune which still attended him was but an accidental advantage—that discipline which prevailed in his army was produced and cultivated by his father—but his intemperance, his cruelty, his vanity, his passion for useless conquests, were all his own. His victories, however, served to crown the pyramid of Grecian glory, and to show to what a degree the arts of peace can promote those of war.

Alexander, on his death-bed, gave his ring to Perdiccas, one of his officers, but named no successor; and when he was asked to whom he wished the empire to devolve, he replied, "To the most worthy." Perdiccas, sensible that his pretensions would not justify direct assumption of the government of this vast empire, brought about a division of the whole among thirty-three of the principal officers: and trusting to their inevitable dissensions, he proposed by that means to reduce all of them under his own authority.

A series of civil wars and intrigues were the result of Perdiccas's conduct. The consequence was, a total extirpation of the family of Alexander, and a new partition of the empire into four great monarchies, the shares of *Ptolemy*, *Lysimachus*, *Cassander*, and *Seleucus*: of these the most powerful were that of Syria under Seleucus and his descendants, and that of Egypt under the Ptolemys.

There is little of an interesting or pleasing nature in Grecian history, from the period of the death of Alexander. Demosthenes once more made a noble attempt to vindicate the national freedom, and to excite his countrymen, the Athenians, to shake off the yoke of Macedon. But it was too late. The pacific councils of Phocion suited better the languid spirit of this once illustrious people. The history of the different republics presents from this time nothing but a disgusting series of uninteresting revolutions, with the exception only of that last effort made by the

Achæan states to revive the expiring liberty of their country : a design which was rendered abortive by the jealousy of the greater states.

The period had now arrived when a foreign power was to reduce all under its wide-spreading dominion. The people of Ætolia, attacked by the Macedonians, rashly besought the aid of the Romans, who were at this time the most powerful cotemporary nations. Eager to add to their dominion this devoted country, the Romans cheerfully obeyed the summons, and speedily accomplished the reduction of Macedonia. Perseus, its last sovereign, was led captive to Rome, and graced the triumph of Paulus Æmilius, 167 A. C.

The Romans were advancing with rapid strides to the conquest of all Greece : they gained their end by promoting dissensions between the states, which they directed to their own advantage. A pretext was only wanting to unsheath the sword ; this was furnished by the Achæan states, who insulted the deputies of Imperial Rome, which drew on them at once the thunder of the Roman arms : Metullus marched his legions into Greece, gave them battle, and entirely defeated them. Mummius the consul terminated the work, and made an easy conquest of the whole of Greece, which became from that period a Roman province, under the name of Achæia, 146 A. C.

ROME.

After the fall and conquest of Greece the history of Rome becomes the leading object of attention. The era when Italy was first peopled cannot be ascertained with certainty. There is every reason to believe that it was inhabited by the Etruscans, a refined and cultivated nation, many ages before the Roman name was known. There are monuments existing at this day, which prove them to have been a people familiar with splendour and luxury. The striking affinity between their alphabet and that of the Phenicians, confirms the supposition with respect to their eastern origin. The rest of Italy was divided among the Umbrians, Ligurians, Sabines, Veientes, Latins, Æqui, and Volsci ; each a rude and uncultivated people.

Rome was governed by kings for 240 years, from the building of the city until the time when the regal power was abrogated.

Romulus, its founder, first divided the city into thirty

curiæ, or courts, and the people into three tribes, and having fixed the state of things, he took an opportunity of carrying off the Sabine women, while they attended some public games. This gave rise to a long and violent war with the Sabines; but, by the interposition of the females who had been made captive, it was agreed that Tatius, the Sabine general, should share with Romulus the government of Rome; he being slain, the sole power was vested in Romulus, A. C. 753.

Numa Pompilius succeeded Romulus. He turned his thoughts to the cultivation of peace, instituted religious rites, and added two months more to the year, which till that time consisted of ten only.

Tullus Hostilius was impatient of peace, and born for arms; he destroyed the old city Alba, transferring all its inhabitants and riches to Rome.

Ancus Martius enlarged the city of Rome, by taking in the Aventine Mount, and the Janiculum; he also, according to some historians, built Ostia, at the mouth of the Tiber.

Tarquinius Priscus is said to have instituted the games of the Circus, to have laid the foundation of the Capitol, and made drains for carrying off the filth of the city. He increased the number of senators, and subdued some of the neighbouring people, and at last was, in his old age, killed by the sons of his predecessor.

Servius Tullius made several regulations for the public good. He first established the *census*, which he ordered to be made every fifth year. From the census, he divided the people into classes, and centuries, or hundreds. But after he had reigned 44 years with the greatest applause, he was cut off by the execrable parricide of his daughter and his son-in-law, Tarquin. The former is said to have driven her chariot over the body of her father.

Tarquin, surnamed the Proud, governed the kingdom with the same wicked cruelty and tyranny by which he came to it. He is said to have been the first who erected prisons, and practised tortures in Rome. While this tyrant was besieging Ardea, the citizens made use of the pretence given them by the attempt his son Sextus made upon the chastity of Lucretia to be freed from his tyranny. Tarquin lived 13 years after his banishment. Thus the regal power, hateful to the Romans, was abrogated in the 244th year from the building of the city, and 509 A. C.

After the expulsion of the kings, a republican form of government was established, under two magistrates, annually elected, called Consuls, whose office consisted in superintending the rites of religion, in controlling the finances, in levying and commanding armies, and in presiding at public assemblies.

In periods of imminent danger, however, they chose a Dictator, whom they invested with a temporary despotism ; but the people being dissatisfied with their share in the government, were allowed to choose five magistrates, called Tribunes, whose number was afterwards increased to ten, and whose office consisted in defending the oppressed, and in bringing the enemies of the people to justice.

The Decemviri were ten persons elected for the institution of new laws, and invested with absolute power for one year. Appius Claudius, one of the number, attempted to render the office perpetual ; but the people punished the meditated usurpation, and restored the consular and tribunitian power, which had been set aside under the decemviri.

In the year of the city 394 the Gauls, under their leader Brennus, invaded Italy, took and plundered Rome, and afterwards laid it in ashes. From this state the Romans had scarcely risen when they began to subdue many of the neighbouring nations ; and in less than 500 years from its foundation by Romulus, they made themselves masters of all Italy.

The Carthaginians were a powerful and very commercial people on the coast of Africa, where Tunis now lies, and becoming the rivals of Rome, were regarded as enemies. These people having granted assistance to the enemies of Rome, war was declared against them ; and a peace having been twice made and broken between the rival states, in the third war Carthage was plundered and levelled with the ground, about 146 A. C. These wars are usually called the three Punic wars.

Pompey and Cæsar having both obtained the highest dignities, and neither being willing to own a superior, Cæsar, who had been victorious in Gaul and Britain, being made dictator, set out in pursuit of his rival, Pompey, who was attended by the senate and consuls ; and meeting him in the plains of Pharsalia, in Thessaly, the conflict began : when Cæsar proving victorious, became master of the liberties of Rome, 43 years before the birth of Christ.

All opposition being ineffectual, Cæsar made himself

absolute; till at last he was assassinated in the Senate-house by the machinations of Brutus and Cassius. But the Romans did not recover their former liberties by the death of Cæsar; for Octavius his nephew, having got rid of every competitor, had the titles of Emperor and Augustus conferred on him by the senate, and became sole master of the Roman empire, 31 years before Christ.

Before we enter upon the state of the Romans under the government of emperors, it may be proper to give some information respecting their immense empire.

The empire of Rome received its chief acquisitions during the ages of the republic; and it was the policy of Augustus and his successors rather to preserve than extend their dominion. Britain, however, was conquered by the emperors of the first century of the Christian era, and Dacia by Trojan.

The empire of Rome was about 2000 miles in breadth, from the wall of Antoninus and the northern limits of Dacia, to mount Atlas and the tropic of Cancer; it extended in length more than 3000 miles, from the Western Ocean to the Euphrates, and was supposed to contain 16,000 square miles. The number of subjects who, either as citizens, provincials, or slaves, observed the laws of Rome, is estimated at 120,000,000. •

The trade of Rome was as extensive as avarice and luxury could make it. Amber was brought from the Baltic, and furs from Scythia. Babylonian carpets and other manufactures of the east were in frequent use. Diamonds, aromatics and silks, of which a pound was esteemed equal to a pound of gold, were annually exchanged in India for the silver of Rome. The army upon the peace establishment consisted, in the time of Adrian, of 375,000 men. The annual pay of a Roman soldier was about eleven pounds of our money: and after twenty years' service he was rewarded with a hundred pounds sterling, or an equivalent quantity of land.

Every part of the Roman empire was made accessible by roads, on which it was easy to travel a hundred miles in a day. At the distance of six miles from each other posts were established, each of them provided with forty horses, of which the use was seldom permitted to any other than the servants of the public.

Augustus allayed all the discords with which the republic had been agitated. He reigned 44 years after the battle

of Actium, and died, A. D. 14, in the 76th year of his age. He was assisted in his government by Mæcenas, who favoured the nobles; and by Agrippa, who was friendly to the common people, and the commonwealth of Rome. By this means Augustus preserved the appearance of a popular form of government, even while he was divesting the people of all real authority. Our blessed Redeemer JESUS CHRIST was born in the time of this pacific emperor. This is the era of a new chronology, all Christians computing events from the nativity of Christ.

Tiberius, the son of Tiberius Nero and Livia Drusilla who was afterwards married to Augustus, was suspicious, angry, cruel, and debauched. One of his vilest actions was the engagement of Piso, governor of Syria, to poison his nephew Germanicus, at Antioch, in the 34th year of his age, after he had adopted him as his successor. During the reign of this emperor Christ was crucified, died, and rose from the dead. Tiberius reigned 22 years, lived 78, and died A. D. 37.

Caius Caligula was more a monster than a man; of him Tiberius said, that he brought up a serpent for the Roman people. Such was the folly of this emperor, that arrogating to himself divine majesty, he was saluted with the title of Jupiter; and such his barbarity, as to wish the Roman people had but *one neck*, that he might cut it off at *one stroke*. He was killed by the tribunes Cassius and Sabinus, A. D. 40, having reigned three years, two months, and eight days.

Claudius, on account of his folly and simplicity, may rather be said to have been governed by others than to have governed himself. His wife Messalina was so debauched as to marry Caius Silius during the life of her husband. Claudius had another wife called Agrippina, whose son Nero he adopted, to the exclusion of Britannicus, whom he had by Messalina. Under this emperor Great Britain was reduced to the form of a province. He died A. D. 54, being more than 63 years old, of which he reigned not quite 14 years. The revenue which accrued to Rome from the provinces formed an annual income of fifteen or twenty millions, and the people were exempted, before the time of Augustus, for a century and a half, from the payment of taxes. Augustus instituted the customs, and a general excise of one per cent.

Nero, the scourge of mankind, and most cruel of tyrants, for the first five years reigned with applause. His precep-

tors were *Burrhus* and *Seneca*, the one renowned for his skill in arms, the other for his wisdom and learning. Provoked to virtue by the perpetual admonitions of these men, he ruled at first with so much clemency, that when he was to sign an order for the death of any person, he used to say, *I wish I could not write.* But soon changing his manners, he put his preceptors to death, poisoned his brother *Britannicus*, and killed his mother *Agrippina*, and his wives *Octavia* and *Poppaea*. He sunk into so great barbarity, and such foolish luxury, as to set fire to the city of Rome, to fish with nets of gold, and never twice to wear the same clothes. At last, the provinces rising to assert their rights, he was forsaken by all, and put an end to his own life, in the thirty-second year of his age, after having reigned rather more than thirteen years, A. D. 68. *

Galba was saluted emperor by the Spanish army, and soon after slain by the prætorians, for exercising too great severity upon the soldiers. He reigned eight months, and was seventy-three years old.

Otho, being overcome by *Vitellius*, died by his own hand. He was remarkable only for his wickedness, and the shortness of his reign; this being only three months and seven days.

Vitellius was a man of incontinent gluttony; for during the short space of seven months, he consumed in eating at least six millions of our money. Cruelty was another prominent feature in his character; but his reign was short. *Vespasian* being declared emperor by the Syrian legions, *Vitellius*, in the 57th year of his age, was dragged half-naked into the forum by the Roman people, and with exquisite tortures torn to pieces and thrown into the Tiber.

Vespasian was emulous of the virtues of *Augustus*, and was even grieved at the infliction of punishment when justice demanded it. That hateful propensity, avarice, however, counterbalanced these virtues. He reigned ten years, and died A. D. 79, aged 69.

Titus, on account of his singular humanity, was called the delight of mankind; he was so generous, that if he had passed a day without exercising his usual goodness, he used this memorable saying, "My friends, I have lost a day!" He destroyed Jerusalem in the lifetime of his father. He reigned rather more than two years, and died A. D. 81, aged 41. He is supposed to have been poisoned by his brother, who succeeded him.

Domitian, brother of *Titus*, was both cruel and impious.

and persecuted the Christians with the greatest rigour. At last, detested by all on account of his cruelty, he was put to death by his own guards. In the beginning of his reign he entertained himself with killing flies. He was killed A. D. 96, aged 55, after a reign of 15 years.

Cocceius Nerva, a man of prudence and moderation, acquired the dominion when he was advanced in life. Having found the burthen of government too heavy for him, he adopted *Ulpian* Trajan for his successor. He reigned one year and four months, and died A. D. 98, aged 66.

Ulpian Trajan, a valiant man, well skilled in military affairs, was so wise and moderate as to deserve the surname of *Optimus*, or the Best. He subdued all the east, and destroyed the empire of the Parthians, which had hitherto remained unconquered. Such was the justice of this emperor, that when he delivered, according to custom, the sword to the chief of the *Prætorium*, he added, "Use this for me, if I rule with justice, and against me, if I rule otherwise." He reigned nineteen years and six months, and died in Cilicia, as some relate, by poison, A. D. 117, aged 64. He built the famous pillar called by his name in seven years. In his reign flourished Plutarch, Lucian, the Younger Pliny, Suetonius, Florus, and Tacitus.

Ælius Adrianus was equally distinguished for his vices and his virtues. He reduced to obedience, after great slaughter, the tumultuous Jews, who had revolted, and had Barchochebas for their leader. He had an excellent memory, and was skilled in the minutest art. He reigned 20 years and 11 months, and died, aged 62, A. D. 138. In his time lived Ptolemy of Alexandria the astronomer, Justin, and Aulus Gellius. He came into Britain, and divided Scotland from England by a wall of 80,000 paces. He was the author of those celebrated verses to his soul, "*Animula vagula*," &c. which have been so successfully paraphrased by Pope in his "Vital spark of heavenly flame."

Antoninus Pius, who was adopted by Adrian for his virtues, his humanity, and the sweetness of his manners, acquired the distinctive appellation of the *Pious*. He never waged war, but governed the world by his authority alone. He died A. D. 161, aged 75, after a reign of 22 years. In his time flourished Polycarp, Justin the Christian martyr, Galen, and Ælian.

Marcus Aurelius was so devoted to philosophy, as to acquire the name of the *Philosopher*. He was in all things a prince of the greatest moderation, and was successful in the

war with the Marcomanni and Quadi. The memorable saying of Plato was constantly repeated by him : *Happy is that state where philosophers are kings, and kings philosophers.* He died in Pannonia, A. D. 180, aged 58, on which he reigned 19 years.

During the reigns of Nerva, Trajan, Adrian, and the Antonines, the Roman world was governed with judgment, and protected with vigour. The happiness of the people expressed the virtue and the ability of their sovereign. Succeeding ages of misery and oppression remembered with fond regret the mildness of Nerva, and the genius of Adrian. The image of Marcus Antoninus was preserved by many among those of their household gods, and the justice of Trajan was recorded in the congratulatory addresses of the senate, when they wished, upon the accession of a new emperor, "That he might surpass the felicity of Augustus and the virtue of Trajan."

Lucius Commodus succeeded ; the unworthy son of a most worthy father. For in cruelty, lust, foul and base arts, he most resembled Nero. He was killed for his barbarity ; and the senate pronounced him an enemy to men and gods. He ascended the throne A. D. 180, and died in the year 192 : he is supposed to have been nineteen years old at his accession. Commodus was remarkably dextrous in the manly exercise of destroying wild beasts by the spear and the bow : but his character was stained by the folly of exhibiting these qualifications to the public. He was detested for his enormity and infamous debauchery.

Helvius Pertinax was 69 years old before he began to reign ; he was chosen by the prætorian guard, and approved by the senate on account of his experience. He was murdered by the soldiery, A. D. 193, before he had reigned three months. After his death the empire was put up to sale by his murderers, and was bought by Didius Julianus, a lawyer, who was soon put to death. He reigned only 66 days, and was succeeded by Severus.

Septimus Severus was a man whose severity coincided with his name. He encountered and conquered Pescennius Niger, prefect in Syria, and Clodius Albinus, prefect in Britain, who were both competitors for the empire. He died at York, A. D. 211, after having reigned 17 years, aged 67.

• *Antoninus Caracalla* and *Geta*, two sons of Severus, reigned with equal authority after the death of their father. Geta was of a mild temper, the other rash, fierce, and cruel : hence

proceeded perpetual discord between the brothers. At last Caracalla killed Geta in the arms of his mother. After a cruel and abominable reign of six years, the career of this monster was terminated by assassination, A. D. 217.

The disorders in the empire, which began with Commodus, continued for about a century, till the accession of Diocletian. That interval was filled by the reigns of Heliogabalus, Alexander, Severus, Maximin, Gordian, Decius, Gallus, Valerianus, Gallianus, Claudius, Aurelianus, Tacitus, Probus, and Carus, a period the annals of which furnish neither information nor amusement. The reign of Alexander Severus should be excepted. The character of this mild, beneficent, and enlightened prince, seems the more amiable, when contrasted with those who preceded and followed him.

Constantius, the father of Constantine the Great, was created consul, A. D. 291. He and Gallorius were emperors in 304. by the resignation of Maximilian and Diocletian. Constantius died at York, A. D. 306. With him ended the state of Rome under the pagan emperors.

Constantine the Great began to reign A. D. 306. The first years of his government were disturbed by the efforts of Maxentius in the west, and Maximin in the east, his colleagues in the empire, to root out Christianity. But Maxentius perished miserably, after he had been defeated in a pitched battle by Constantine: at this time a cross is said to have appeared in the heavens, with this inscription, *In hoc signo vinces*, Under this banner shalt thou conquer: but the account of this supernatural appearance is generally disbelieved by those who are not influenced by papal superstition. Some time after Maximin died. Licinius, who had married the sister of Constantine, yet survived, but not long after he also was slain. These tyrants being thus removed, Constantine openly professed the Christian religion. While he was yet a novice in the faith he fluctuated between the sect or heresy of Arius and the orthodox opinion of Athanasius, although he professed to be a resolute defender of the decrees of the council of Nice. By him the seat of the empire was removed from Rome to Byzantium, where a new city was raised, and from his name called *Constantinople*. He reigned till the year 337, when he died, leaving behind him three sons, Constans, Constantine, and Constantius. He was baptized a little before his death. In his family he was unfortunate. He took off his brother-in-law Licinius

for his treachery, put to death his own son Crispus on the complaints of his wife Fausta, and condemned her to die, for having falsely accused his son.

Constantinople was dedicated A. D. 330, or 334, and contained, a century after its foundation, a capitol or school of learning, a circus, two theatres, eight public and 153 private paths, 52 porticoes, five granaries, eight aqueducts, four spacious halls, 14 churches, 14 palaces, and 322 streets. There were 583 permanent garrisons upon the frontiers of the empire, and the military establishment under the successors of Constantine consisted of 645,000 soldiers. The new capital was characterized by eastern splendour, luxury, and voluptuousness, and the cities of Greece were despoiled for its embellishment.

The empire was divided among the three sons of Constantine, and, as is usual in such cases, an intestine war broke out with great fury. But Constantine, who began the war against Constans, was slain near Aquileia. Constans not long after met with the same fate. Italy, Africa, and Illyricum were apportioned to him, and upon the death of Constantine, in 340, he came to the possession of Gaul, Spain, and Britain. He was the great patron of Athanasius; and was killed by the treachery of Magnentius, whose life he had formerly saved. He was 30 years old, of which he reigned 13. Constantius lived upwards of 40, and reigned 25 years. He took the part of the Arians, and persecuted the orthodox party. He died A. D. 361.

Julian was named the *Apostate* from having renounced the Christian faith, through the influence of some philosophers, under whom he had studied at Athens. He abstained indeed from murder and bloodshed, but took another course: he fomented divisions among the Christians, deprived the youth of a learned education, and stripped them of their fortunes. Whenever the Christians complained of this injurious treatment, he only ridiculed them, answering in the words of Christ himself, "*Blessed are the poor.*" At length, that he might give the Christian religion a deadly wound, he attempted to rebuild the temple at Jerusalem, but this undertaking was frustrated, as Ammianus Marcellinus, a heathen writer, testifies, by flames bursting out of the ground. The church suffered much by the conduct of this emperor, who endeavoured to undermine the very foundations of the Christian religion. He was slain in battle with the Persians, in the thirty-first year of his age, after a reign of three years, A. D. 363. Julian was the slave of the

most bigoted superstition, believing in omens and auguries, and fancying himself favoured with an actual intercourse with the gods and goddesses.

Jovian, a captain of the domestic guards, was declared emperor by the suffrages of the army, A. D. 363. The short reign of *Jovian* (a period of seven months) was mild and equitable; he favoured Christianity, and restored its votaries to all their privileges as subjects. He died suddenly, at the age of thirty-three.

Valentinian, on the death of *Jovian*, was chosen emperor by the army. He caused his brother *Valens* to take the name of *Augustus*. He waged war with the *Alemanni*, the *Saxons*, the *Quadi*, and other northern nations, and died in *Pannonia*, A. D. 367. *Valens*, who had a quarrel with the *Goths*, being wounded in a battle, retired to a small cottage for safety; but was burnt alive by those barbarians. He was a constant protector of the *Arians*. In the reign of *Valens* the *Goths* took possession of *Dacia*, and were known by the distinct appellation of *Ostrogoths* and *Visigoths*, or *Eastern* and *Western* *Goths*. The irruptions of these barbarians became frequent and extensive. In the battle of *Adrianople* two-thirds of the Roman army were cut to pieces, and the *Goths* often approached within sight of the walls of *Constantinople*.

Gratian commenced his reign, A. D. 375. He was educated by *Ansonius* the poet, whom he advanced to be consul, and associated *Theodosius* with himself in the government, who ruled with great ability the eastern and western empire. He defeated the *Germans*, and made a great slaughter of them, and was therefore called *Aleman-nicus*. He was a good friend to *St. Ambrose*, but fond of sports and hunting, and of foreign rather than his own soldiers. He was murdered by *Andragathias*, general to *Maximus*, governor of *Gaul*.

Theodosius, surnamed *the Great*, was adorned with all the virtues of a Christian emperor, and though an excellent general, never engaged in any unnecessary war. He was a prince of singular goodness and humanity; courteous to all. His character was worthy of the best ages of the Roman state. He successfully repelled the encroachments of the barbarians, and secured the prosperity of his people by salutary laws. He died after a reign of eighteen years, assigning to his sons, *Arcadius* and *Honorius*, the separate sovereignties of *East* and *West*, A. D. 395. In this reign the worship of heathen deities, which had hitherto been

silently permitted, was abolished by the severest restrictions. The temples were destroyed, the images thrown down, and every opportunity of festal celebration carefully prevented. After the legal establishment of Christianity, the sovereignty became more safe, as well as more sacred; and the murders and violent deaths of the emperors ceased with the abolition of idolatry. Constantine weakened the sinews of the empire by transferring the seat of it to Byzantium, and drawing off to the east those veteran legions which defended the boundaries, by encamping on the banks of the Danube and the Rhine. The western provinces being deprived of their security, were exposed to the incursions of the northern nations. The emperors by associating too many colleagues with them in the government, caused the empire to be divided into factions; endless divisions and intestine wars were the natural consequence.

Arcadius and *Honorius* in their reigns suffered the barbarian nations to establish themselves on the frontier provinces, both of the east and west. The Huns overspread Armenia, Cappadocia, and Syria. The Goths, under *Alaric*, ravaged to the borders of Italy, and laid waste Achaia to the Peloponnesus. *Stilicho*, an able general, made a noble stand against these invaders, but the weakness of *Arcadius*, and the machinations of his rivals, frustrated all his plans.

Alaric, now styled King of the Visigoths, and already master of Greece, prepared to add Italy to his new dominions. After he had passed the Alps, he was met and defeated by *Stilicho*, who then commanded the armies of *Honorius*. In this interval, a torrent of the Goths breaking down upon Germany, forced the nations whom they subdued (the Suevi, Alani, and Vandals) to precipitate themselves upon Italy. They joined their arms to those of *Alaric*, and thus reinforced determined to overwhelm Rome: the promise of 4000 pounds weight of gold induced him to change his purpose; but this promise having been repeatedly broken, he revenged himself by the sack and plunder of the city, A. D. 410. He was sparing of the lives of the vanquished, and evinced a singular liberality of spirit, by his anxiety to preserve from destruction every ancient edifice. *Alaric* died at the era of his highest glory, while he was preparing for the conquest of Sicily and Africa. *Honorius*, instead of profiting by this event to recover his lost provinces, made a treaty with his successor *Ataulphus*, and ceded to him a portion of Spain.

At a time like this, when the power of the state was humbled, the wealth and authority of individuals was enormous. There were senators who received the annual stipend of £160,000. The public distributions of bread, oacon, oil, and wine, were supported at the expense of several millions, and the lazy population might retire from the *elemosynary* gratification of their appetites to the enjoyments of the theatre, the circus, and the bath.

In the east the mean and dissolute Arcadius died, in the year 408, leaving that empire to his infant son, Theodosius the Second, whose sister Pulcheria swayed the sceptre with much prudence and ability. Honorius died in the year 423. The laws of Arcadius and Honorius were, with some few exceptions, remarkable for their wisdom and equity.

The *Vandals*, under Genseric, subdued the Roman province in Africa. The *Huns*, in the east, extended their conquests from the borders of China to the Baltic Sea. Under Attila they laid waste Moesia and Thrace; and Theodosius, after a vain attempt to murder the barbarian general, ingloriously submitted to pay him annual tribute. Attila, with an army of 500,000 men, threatened the total destruction of the empire. He was opposed by Ætius, general of Valentinian III. then emperor of the west, who was shut up in Rome by the arms of the barbarian, and compelled to purchase a peace. After Valentinian, there was a succession of princes or rather of names, for the events of their reigns do not deserve a detail. The empire of the west came to a final period in the reign of Romulus, the son of Orestes, who had the surname of Augustulus bestowed on him.

Odoacer, Prince of the Heruli, subdued Italy, and spared the life of Augustulus, on condition that he resigned the throne, A. D. 476. There is a period of 1224 years from the building of Rome to the extinction of the western empire. Its ruin was the inevitable consequence of its greatness. The extension of its dominion relaxed the vigour of its frame—the victorious legions were infected by the vices of the nations which they had subdued—their commanders were corrupted by foreign luxuries—patriotic ardour was supplanted by selfish interest—the martial spirit was debased *purposely* by the emperors, who dreaded its effect on themselves—and the whole mass, thus enervated, fell an easy prey to a torrent of barbarians.

Theodoric, Prince of the Ostrogoths, afterwards deservedly named the *Great*, attempted the recovery of Italy, Zeno,

emperor of the east, having promised him the sovereignty as the reward of his success. The standard of Theodoric was attended by the whole nation of Ostrogoths. After repeated conquests, he compelled Odoacer to surrender all Italy. The Romans, who had but tasted of happiness under Odoacer, were peculiarly fortunate in having Theodoric for their ruler. He possessed every talent and virtue of a sovereign; his equity and clemency rendered him a blessing to his subjects: he made alliances with the Franks, Visigoths, Burgundians, and Vandals; and he left a peaceable sceptre to his grandson Athalaric. The mother of this infant ruled with wisdom and moderation.

On the decline of the Roman empire an almost total ignorance of the useful arts had taken possession of the western world. A barbarous, illiterate people, who in hostile troops then poured themselves into the western provinces, gave the first blow to learning. Academies were ruined, libraries burnt, and the learned compelled to shut up their schools, and relinquish their studies. Nor were the Christian priests less concerned in the destruction of letters. When paganism prevailed, they received continual injuries from the great philosophers; and even now found them very troublesome enemies. They not only armed themselves against those teachers, but endeavoured to forbid their writings of whatever sort, as dangerous and pernicious. Both hastened the destruction of letters; yet this age produced some learned men. Among the Christians, Sulpicius Severus, Cyril of Alexandria, Socrates, Sozomon, Theodoret, Isidore, Sidonius Apollinaris, &c. were of the first class. The most celebrated among the pagans were Zosimus and Olympiodorus.

Justinian, the ruler of the eastern empire, was a prince of mean ability, vain, capricious, and tyrannical. The Roman name, however, arose for a time from its abasement by the merits of its generals, the most renowned of whom was *Belisarius*, the support of his throne. He was one of the greatest and most successful generals that ever lived; he subdued the Vandals and restored Africa to the Roman empire, after it had been separated for more than one hundred years; he refused the kingdom of the Goths; and his arms and policy composed the disputes of the performers in the circus and amphitheatre. These were the factions of the green and light blue (colours worn by the performers) which had assumed a serious appearance, and threatened to hurl Justinian from the throne. *Belisarius* wrested Italy from

its Gothic sovereign, and once more restored it for a short space to the dominion of its ancient masters. The heroic Totila, the leader of the Goths, besieged and took the city of Rome, but forbore to destroy it, at the request of Belisarius. This great man was compelled to evacuate Italy; and on his return to Constantinople, the emperor ordered his eyes to be put out; and he lay at the foot of a bridge, soliciting alms in these words, *Date obolum Belisario*.

He was superseded in the command of the armies by the eunuch Narses, who defeated Totila in a decisive engagement, in which the Gothic prince was slain. He invited the Lombards to avenge his injuries, who overrun and conquered the country, A. D. 568.

The eastern empire was particularly flourishing in the reign of Justinian. The emperors themselves accelerated the ruin of the empire by their luxury and indolence. The Bulgarians claimed part of the empire, as did the Saracens, Syria, Palestine, Egypt, Cilicia, and the neighbouring regions; and afterwards overrunning the rest of the Roman world, they laid siege to Constantinople itself. These were followers of Mahomet; who, actuated by fanatic rage, believed the whole world was destined for them, and therefore attacked the neighbouring nations with irresistible fury. When the empire could scarcely defend itself against these Saracens, Constantinople was taken by Baldwin, Earl of Flanders. There appeared also another emperor at Trebizond, that city and the regions round it being torn from the rest of the Roman empire, which was at last totally destroyed by the Turks. They first, in the reign of Heraclius, passing through the Caspian Straits, wandered far and wide over the east, embraced the Mahometan religion, and were divided into several principalities. But the rest being broken and extinct, the posterity of Othoman, or Othman, alone took the lead, and ever since the Turkish sovereigns have assumed the name of Othomans. These Othoman princes, commonly called Turks, having subdued the greatest part of the provinces possessed by the Saracens, swallowed up the rest of the Roman empire, and Constantinople was taken by them in the year 1453, which has ever since been the imperial seat of the Turkish emperors.

MODERN HISTORY

It is impossible to enumerate the kingdoms or states which were formed on the extinction of the Roman power in the west; amidst dark ages and barbarous nations, history records only ignorance and crimes; it is sufficient to remark, that from its ruins arose all the principal states of Europe.

GERMANY.

The Emperor of Germany, whose eldest son or heir was usually elected King of the Romans, as a preliminary step to his succession to the empire, affected to be the representative of the ancient Romans; and before the late subversion, Germany contained not fewer than 300 sovereign princes, independent in their own dominions, but forming one political body, which recognised the emperor as its head.

The present imperial family derive their origin from Rodolph, Count of Hapsburg, who by his bravery and address added several extensive countries to the empire, and formed a plan of aggrandizement, which his family long pursued.

The first emperor, after the dignity became elective, was Conrad, Count of Franconia, who died in 919, and was succeeded by Henry, surnamed the Fowler, a prince of considerable talents; and who again was succeeded by his son Otho I. the most powerful prince of his age, and justly named the Great.

Henry IV. called the Great, ascended the throne in 1056, when only an infant, and had to maintain a perpetual struggle with the popes, at that time the terror and the scourge of princes, and to whom his son Henry V. disgracefully surrendered the right of investiture.

Henry V. was succeeded by Lothario, Duke of Saxe-Supplembourg; but in the reign of his successor, Conrad III. the sovereignty was disputed by the Dukes of Bavaria, whose family name was Guelph, while the emperor's general was a native of Heighibelin; and this circumstance gave rise to the Guelphs and Ghibellines the former of which espoused the interest of the pope, the latter of the emperor.

Frederic Barbarossa followed Conrad III. to whom he was nephew, and justified the choice that had been made of

him. His son, Henry VI. imitated his glorious example, but Frederic II. the next emperor, lost all the acquisitions of his predecessors, and submitted to the influence of the pope. In 1338, however, the *Pragmatic Sanction* was established, which declared that the pope had no right to interfere in the election of an emperor.

In the reign of Maximilian I. the Netherlands became a part of the empire, about which time also Germany was divided into circles.

Maximilian was succeeded by Charles V. the most illustrious of all the emperors of Germany, and whose power extended over both hemispheres; but becoming disgusted with the world, he resigned the empire to his brother Ferdinand, and the kingdom of Spain to his son Philip II.

Leopold I. during his reign concluded the peace of Westphalia, and saw his capital, Vienna, which had been besieged by the rebellious Hungarians, aided by the Turks, relieved by the valour of Sobieski, King of Poland. His son and successor Joseph I. who mounted the imperial throne in 1705, in conjunction with the allies, carried on a successful war against France.

Charles VI. at his death leaving no male issue, the Austrian dominions devolved to Maria Theresa, whose husband Francis I. Grand Duke of Tuscany, was finally raised to the imperial dignity, after the death of Charles VII. Elector of Bavaria, who had intermediately swayed the sceptre.

Joseph II. who succeeded Francis I. was a wise and benevolent prince, on whose death, without issue, his brother Leopold II. Duke of Tuscany, was elevated to the imperial dignity in 1790; and in less than two years left the throne to his son Francis II. whose reign was eventful beyond any thing that can be named in the annals of Germany. Embarking early in the confederacy against France, and being unsuccessful, by the treaty of Campo Formio he was obliged to cede the Netherlands to that power. The war being again renewed with no better success, was terminated by the peace of Luneville. Another coalition was formed to resist the insatiate ambition of Buonaparte, and fortune being still in the favour of that usurper, the emperor was obliged to conclude the treaty of Presburg, and to make many fresh sacrifices; among which was that of renouncing the dignity of Emperor of Germany, and to assume only that of Emperor of Austria. At length however by the late change in the politics of Europe, in which this prince took so decided a part, he has recovered most of his dominions.

FRANCE.

The ancient name of France was Gaul; it received the former name from the Franks, a German tribe, who under Clovis established the French monarchy.

On the death of Clovis, a civil war arose between his sons and their successors, who could not agree in their divisions of the kingdom. At length Pepin, mayor of the palace, assumed the sovereignty, and transmitted it to his posterity.

His successor was Charlemagne, who, on the demise of his brother Carloman, became sole monarch of France; and during a long and glorious reign of 45 years, extended his dominion over the greatest part of Europe, and was crowned at Rome in 800. The posterity of Charlemagne filled the throne till 987; when Hugh Capet, a potent chief, obtained possession of sovereign power; and thus founded the third dynasty of kings in this country.

The most memorable events which took place in the succeeding reigns were the Crusades, which commenced in the reign of Philip I. at the persuasion of Peter the Hermit, and with the approbation of Pope Urban; the institution of parliaments, under the reign of Philip IV. surnamed the Fair, who left an only daughter, and in whom, in consequence of the Salic law, which excludes females, the direct line of Capet ended, and Philip de Valois, the next male heir, was raised to the throne in 1328; the claim made to the French crown by Edward III. of England; and the battle of Cressy, gained by that monarch.

Henry V. of England having gained the battle of Agincourt, in 1420, a treaty was concluded, by which his son, the unfortunate Henry VI. was crowned King of France at Paris; but towards the close of that century the French recovered from the English all their possessions in that country, much to the happiness of both nations.

Joan of Arc, the pretended prophetess, who was afterwards inhumanly burnt for sorcery, distinguished herself in the reign of Charles VII. and was principally instrumental in delivering her country from the English.

For thirty years, however, France was harassed by civil wars, which began in the reign of Francis II. and which were occasioned by attempts to extirpate the protestants, or Huguenots, as they were called. At length, in the reign of Charles IX. religious fury broke out in all its violence.

and on the eve of Saint Bartholomew, 1572, about 70,000 protestants were murdered by the order of that execrable monarch.

In Henry III. ended the line of Valois, when Henry IV of the house of Bourbon, ascended the throne; and proving one of the best and most amiable of princes, justly obtained the title of Great; but fell by the hand of a fanatic, in 1610.

In the reign of Louis XIII. his minister Richelieu, in order to put an end to the disorders which prevailed, had recourse to the bold measure of establishing an absolute government; and the fetters which had been forged were rivetted under Louis XIV. a man of the most restless spirit and unbounded ambition; but who, after a series of defeats by the English and their confederates, was obliged to conclude the peace of Rhyswick. This prince, who notwithstanding his ambition, had some great and splendid qualities, was succeeded by his great-grandson, Louis XV. a weak and debauched monarch: and upon his demise, in 1774, his grandson, Louis XVI. mounted the throne, and expiated the political crimes and follies of his predecessors, by falling under the stroke of the guillotine, Jan. 21, 1793; while, a few months after, his queen, Maria Antonetta of Austria, shared the same fate, in consequence of one of the most tremendous revolutions that had ever agitated and afflicted the human race. Royalty being abolished, a republic was established, which waged a successful war with the principal powers of Europe, at the same time that it was torn with intestine divisions, and disgraced by atrocities that make the heart shudder to contemplate.

The republic, however, was not of long duration, for after various modifications, in which the name of liberty had been prostituted to the most unworthy purposes of faction, and deluges of blood had been spilt, it was found that the theories of government which had been formed were incompatible with practice; and Buonaparte, a successful and enterprising general of the revolution, seized on the executive power, under the title of First Consul, and associated two others with him, in name, but without authority.

Soon after he assumed the title of Emperor of the French, and King of Italy; established a military government; restored the profession of Christianity in France, and a variety of civil institutions, which the frenzy of the revolution had abolished. For some time he carried his

victorious arms from one side of Europe to the other ; by force or fraud, annexed Holland, as well as many of the smaller states, to France, and dictated terms of peace to every country except Great Britain. But the ambition which had prompted these excesses became his ruin : after repeated defeats in Spain, Portugal, Russia, Germany, and France, he was compelled to yield the sovereignty of the latter to one of its native princes, who had long found an asylum in England. Buonaparte, however, whose ambition is ever restless, has recently made an attempt to regain his usurped dominion, but without any permanent success ; and Louis XVIII. has a second time ascended the throne of his ancestors, amidst the acclamations of the French people

SPAIN

On the decline of the Roman power Spain became a prey to the Suevi, the Vandals, and the Alani. Adolphus, King of the Goths, subdued them, and founded the kingdom of the Visigoths, in 411, which continued till 712, when Spain was conquered by the Saracens. At length, in the 15th century, an union of the different states or kingdoms took place under Ferdinand and Isabella, in whose reign, and under whose auspices, Columbus discovered America.

Ferdinand was succeeded by his grandson, Charles V. who, after filling Europe with his fame, resigned the crown to his son, Philip II. a gloomy and vindictive tyrant, who united Portugal to his dominions, but who lost the Seven Provinces of the Netherlands, in 1579.

Under Philip IV. Portugal rebelled, and established its independence. Under his successor, Philip V. the first of the house of Bourbon, extensive wars involved Europe, which were concluded by the treaty of Utrecht. Charles III. entered into the famous family-compact, and waged an unequal war with England. Charles IV. at first made a demonstration against the French revolutionists ; but changing sides, he became a vassal to France, and Buonaparte, taking advantage of his weakness, carried both him and his son, now styled Ferdinand VII. prisoners into France. He then endeavoured to place his brother Joseph on the throne of Spain. But the opposition he met with from the Spaniards, and the powerful support they for several years received from England, conspired finally to defeat his project and to deliver this unhappy country from so galling a tyranny.

SWEDEN, DENMARK, AND NORWAY.

The history of Sweden, Denmark, and Norway, at an early period, is necessarily obscure; and, as is usual among uncivilized nations, we find little except revolutions and massacres. At length they were united under Margaret Waldemar, by the treaty of Calmar, 1387. But Gustavus Vassa, a descendant of the ancient kings of Sweden, recovered the liberty of his country in 1544, and the states made the crown hereditary in his family.

The most remarkable events during the reigns of his successors are the following: Gustavus Adolphus, a most illustrious prince, was killed at the battle of Lutzen, in 1532; his daughter Christina resigned the crown in favour of his cousin, Charles Gustavus; Charles XII. one of the most extraordinary men that the world ever saw, closed his mortal career at the siege of Fredrickshall, in 1718; Gustavus III. though he had sworn to preserve the liberties of the Swedes, in violation of his oath rendered himself absolute, and was assassinated at a masked ball, in 1792. On his death his son, Gustavus IV. ascended the throne, but has recently been deposed, and his uncle called to reign in his stead; while one of the principal generals of the French empire, Bernadotte, is invested with the title of Crown Prince.

POLAND.

Poland was partitioned, in 1795, under the reign of Stanislaus Augustus, by the courts of Russia, Prussia, and Austria; and since that time has undergone farther changes by the victories of the French over the Austrians and the Prussians.

The form of its government was elective monarchy; and under John Sobieski, the greatest of its sovereigns, it made a distinguished figure among the European powers.

PRUSSIA.

Prussia, formerly a marquisate, and then an electorate was raised to a regal government, in 1701, by Frederick, son of Frederick William, surnamed the Great, who had paved the way to the attainment of this dignity, and who was succeeded by his son of the same name, a wise and politic prince.

Frederick William was succeeded by his son Frederick II

a great and warlike king, who filled Europe with the terror of his arms, while he cultivated the arts of peace occasionally with no less success. He left the throne to his nephew, Frederick William II. a weak and unprincipled prince, who dying in 1797, was succeeded by Frederick William III.

RUSSIA.

Russia, formerly known by the old name of Muscovy, is comparatively a new country, and did not reach any considerable degree of civilization till about a century ago; though, when properly governed, its power and resources entitle it to a high rank among the European nations.

The title of Czar of this country was first assumed by John Basilowitz, in 1486, after having liberated Russia from the dominion of the Tartars.

From this period we read only of tyrannical governors and barbarous subjects, during a succession of reigns; for it was not till the time of Peter the Great that Russia began to assume its consequence.

That he might improve his people, and instruct them in the knowledge and arts of other nations, this prince travelled into different countries of Europe, and worked as a common ship-carpenter both in Holland and England. He was the first that assumed the title of Emperor; he built Petersburg, which he made the capital instead of Moscow; extended his dominions by various conquests; and, in a word, was one of the most extraordinary men that ever appeared on the theatre of the world.

His successor was his widow, Catharine, whom he had promoted to his throne and his bed, though a poor peasant, on account of the talents she displayed; and she proved worthy of his choice.

Catharine was succeeded by Peter II. grandson of Peter the Great, who performed nothing very remarkable; but who was followed by Anne, Duchess of Courland, an empress of considerable energy of character, and whose reign was successful.

The successor to Anne was John, son to her niece Catharine; but who being deposed and murdered in 1740 Elizabeth, second daughter of Peter the Great, was elevated to the throne, and swayed the sceptre with glory.

Elizabeth was succeeded by her nephew, the Duke of Holstein, who took the title of Peter III. but was soon deposed by his consort Catharine, and put to death.

A faction, which she had taken care to form, then raised Catharine, the second of that name, to the throne, which she filled with glory, as far as conquest and national improvements warrant the expression; but her vices as a woman were degrading to her sex, and the policy by which her relation with foreign powers was regulated was often detestable. Yet it must be observed, that Russia has generally been most fortunate under female reigns.

The successor to Catharine II. was her son, Paul Petrovitz, who, from natural weakness, or depravity of heart, acting the part of a capricious tyrant, was deposed and murdered in 1801.

His son, Alexander Paulowitz, succeeded him, and has since made a conspicuous figure in the politics of Europe.

TURKEY.

The Turks and Huns, who were descendants of the ancient Scythians, having established themselves in a tract of Asia, called Georgia, or Turcomania, Othman, one of their princes, to whom the Ottoman empire owes its name and establishment, seized on Bythinia; and fixing the seat of his government at Prussia, assumed the title of Sultan, in 1300.

The religion of the Turks is Mahometism, so called from Mahomet, an impostor, born at Mecca, in Arabia, and who, about the year of Christ 622, declared himself the greatest and last of the prophets that God would send: and by promising his followers the speedy conquest and possession of *this* world, and a paradise of delight in the *next*, but more particularly by the sword, he extended his influence; and his tenets are now professed, not only in Turkey, but in Arabia, Persia, India, Barbary, Egypt, and in short over the fairest portion of the old world.

The Janizaries, who are so often mentioned in Turkish history, are the guards of the sultan's person, and were established by Amurath, grandson of Othman.

Amurath was succeeded by his son Bajazet, surnamed Ilderim, or the Thunderbolt, who, after gaining many splendid victories, was at last defeated and taken prisoner by Timur Bec, or Tamerlane, a prince of the Tartars.

The Sultan Mahomet II. justly named the Great, besieged and took Constantinople, which has since been the seat of the Turkish empire: and thus put an end to the eastern empire of the Romans.

Selim I. was a warlike prince, who extended the limits of the empire by the conquest of Egypt and several countries of the east.

Solyman II. celebrated in history, and who received the appellation of the Magnificent, was unquestionably one of the greatest and most accomplished of all the sultans. He conquered the island of Rhodes, and added Hungary to his dominions, though not permanently. Selim II. his son and successor, distinguished himself likewise by besieging and taking Cyprus and Tunis.

Amurath II. extended his dominions in various quarters ; but with him the general good fortune and power of the Turks seem to have declined, for since that time, in the reigns of Mahomet V. and Mustapha III. the Russians have prevailed, and considerable sacrifices of territory have been made.

There have also been many recent revolutions in Turkey. Selim III. who had filled the throne from 1789, was deposed by Mustapha IV. in 1807 ; who, by another revolution in 1808, was put to death, the Sultan Selim killed, and Mahomet raised to the dignity of sultan.

HISTORY OF ENGLAND.

THE origin of the early inhabitants of Great Britain is not to be traced with any degree of certainty ; the early history of this country being extremely vague and romantic. The most general, and indeed only probable opinion respecting it is, that Britain was peopled at various times from different parts of the continent of Europe ; but the precise time when the first settlement commenced is totally unknown. The earliest authentic account is, that a colony of the subjects of Teutar, King of the Celtæ, embarking from their own coasts in France, landed and settled without opposition on the coast of Great Britain. Their object was that of increasing and extending their commerce, to which they were induced and encouraged by their sovereign, who, on account of his attachment to the commercial interests of the people, was styled *mer-cur*, or merchant ; and hence we have the name of merchant.

The next people that established themselves in Britain were the Belgæ, a colony from the province of Bretagne, in the north of France ; the Celtæ and the Belgæ were two

branches of the Gauls, who were supposed to have been descended from Gomer, the son of Japhet, youngest son of Noah.

The ancient Britons were, in general, tall, well proportioned, and robust; they stained their bodies with a seaweed, called woad, which not only defended in winter the pores of the skin from the inclemency of the weather, but gave them also a formidable and tremendous aspect; in their manners they were considered a brave, warlike, and generous people, and particularly remarked for their honesty and sincerity.

The dress of the nobility was a kind of party-coloured plaid, which descended from the waist to the middle of the leg; but this they must have imported, for it does not appear they had the least notion of manufacturing their wool.

Those who held any office of dignity, such as that of chieftain, prince, &c. wore, beside the plaid above described, chains of gold round their necks, and the women wore bracelets of the same metal; but the generality of the ancient Britons had no other covering than the skins of wild beasts, nor any other ornament than a coarse painting of flowers, and figures of animals, on different parts of their bodies.

Their habitations were a sort of huts, or cottages, sometimes formed of boughs, in the nature of arbours, and sometimes of mud and clay, according to the season of the year, and were generally covered with turf. Their towns and villages consisted of a number of these huts, irregularly placed at small distances from each other, and commonly situate in woods for the conveniency of pursuing their favourite diversion of hunting. Like the Tartars, they roamed about from place to place, and formed a kind of encampment in different parts of the country, according to the different seasons of the year; in summer they generally inhabited the most fertile vales, which afforded the greatest plenty of pasture and water for their cattle; in winter they removed to the hilly countries, as being drier and more healthy.

The usual diet of the inhabitants of Britain before the Belgæ settled in this country was milk, and the flesh of such animals as they killed in hunting; their common drink was water; but when the Belgæ came over from Gaul, they brought with them some knowledge of agriculture, and soon taught the inland inhabitants the art of cultivating their land, so as to produce the grain necessary for making bread

The government of the early Britons was patriarchal, the head of each family being answerable to the neighbouring tribes for the conduct of the whole family.

The several orders of the people were divided into three classes, answering to our nobility, clergy, and commonalty; the last of whom were little better than slaves, being dependent upon the other two.

The nobility were considered, in their several states, as princes, or chiefs, each being the governor of a certain district.

The clergy of the ancient Britons were divided into three orders; namely, the Druids, Bards, and Ubates; these had the whole care of the religion, laws, and learning.

The chief of these orders was the Druids, who had the inspection of all public affairs; but they were subject to a higher power, the high-priest, styled the Arch-druid, who had the power of calling the others to account, and even of deposing them.

To the Bards was assigned the office of making verses in praise of their heroes, and other eminent persons, which verses they set to music, and sung to their harps.

The Ubates were occupied in the study of philosophy, and the works of nature, and, indeed, every art and science that could contribute to excite the astonishment and fix the veneration of the people, who regarded them as demi-gods, endowed with more than mortal wisdom, and illuminated by celestial inspiration.

The religion of the ancient Britons was idolatry of the worst kind, for they sometimes offered human sacrifices to their false gods. They revered the misletoe, and worshipped rocks, stones, and fountains. The greater part of the Druids were put to death by the command of the Roman emperor Nero, when Britain became a Roman province.

The Romans first invaded Britain under Julius Cæsar, 55 years before Christ. At first the Britons opposed them, and several battles ensued, but the Britons being defeated were compelled to sue for peace; yet, after a short campaign, Cæsar was obliged to withdraw into Gaul, whence he came.

In the following summer he returned with a great increase of force; an army of 20,000 foot, a considerable body of horse, and a fleet of 800 ships.

The Britons, under Cassibelaunus, opposed the second landing of Cæsar, but the contest was vain; for Cæsar

advanced into the country, burnt Verulamium, the capital of Cassibelaunus; and after forcing the Britons to submit to a yearly tribute, he withdrew his forces to the continent, and the Britons remained in quiet for nearly a century.

The next Roman emperor that undertook to conquer Britain was Claudius Cæsar, the fourth emperor of Rome, but he did not complete his purpose. The British king Caractacus made a noble stand against him, though he was at last taken captive, and carried a prisoner to Rome: and when led in triumph through it, he exclaimed, "How is it possible that people possessed of such magnificence at home should envy me a humble cottage in Britain!"

Boadicea, Queen of the Iceni (the inhabitants of Norfolk and Suffolk) also opposed the Romans with great personal valour, but she was at last defeated; and in one great battle, A. D. 61, lost 80,000 of her men. To avoid the insults of the Romans, she afterwards poisoned herself.

Britain was not completely conquered till 30 years afterwards, in the reign of Titus, by Julius Agricola, who introduced the Roman arts and most of the improvements of that nation; and soon after, the famous wall from Carlisle to Newcastle, and from the Forth to the Clyde, was built, to prevent the incursions of the Picts from Scotland.

Two hundred and forty years afterwards, A. D. 448, the Roman empire being much on the decline, they were not able to preserve so distant a province, but completely abandoned it, after having kept possession of it for 400 years.

When the Romans withdrew their forces the Picts and Caledonians, the ancient inhabitants of Scotland, ravaged and desolated the country, merely for a supply of their temporary wants.

The Britons first applied for aid to the Romans, but without success; they afterwards solicited succour and protection from the Saxons, who complied with the request by sending an army, A. D. 450, commanded by Hengist and Horsa, two brothers who were highly renowned for their valour, and were said to have been descended from Wodin, their chief idol.

The Saxons were successful against the Scots, and they had no sooner driven them out, than they turned their thoughts to the entire reduction of the Britons; and receiving large reinforcements of their countrymen, they reduced England under their power, and founded the Anglo-Saxon heptarchy; but many of the Britons, rather than submit to the conquerors, retired into Wales, then called Cambria,

where they were sheltered by the inaccessible mountains of that country.

The Saxon heptarchy included that part of Great Britain called England: the several kingdoms of the heptarchy and their founders were as follow :—

Kent,	founded by	Hengist
Sussex,	- - -	Ella
Wessex,	- - -	Cerdick
Essex,	- - -	Erechenwin
Northumberland,		Ida
East Anglia,	-	Uffa
Mercia,	- - -	Crida.

The most renowned defenders of the Britons against the Saxons were the celebrated Ambrosius, and the famous King Arthur; the latter was killed in battle, about the year 546. The Saxon kingdoms did not continue long united: in a short time the chiefs disputed about their several rights, and after a series of wars, which continued more than two hundred years, the whole of the heptarchy fell, and became a conquest to the power of Egbert, King of Wessex, who caused himself to be crowned at Winchester, by the title of King of England, A. D. 827, nearly 400 years after the first arrival of the Saxons in Britain; and thus was laid the foundation of the kingdom of England.

The Danes often ravaged the coast of Britain during the reign of Egbert, but were as often defeated, till his son Ethelwolf succeeded him, in 830, during whose feeble reign the Danes returned, and continued their depredations with but little interruption. In this reign the Picts, so formidable heretofore to the southern Britons, were entirely extirpated by their neighbours the Scots, after a long and terrible war between them.

Ethelwolf left his dominions and royal power to his second son, Ethelbert; after him to his third son, Ethelred.

During both these reigns the Danes continued their incursions, made themselves masters of Northumberland, and several other parts of England, but were strongly opposed by Ethelred, who unfortunately received a mortal wound in a battle he fought with them near Wittingham, A. D. 872, in the sixth year of his reign.

Alfred the Great succeeded to the crown of England in the year 872, when the Danes were in the very heart of his dominions, and all the seaports were filled with their fleets; after several engagements, with various success, he was

obliged to dismiss his very attendants; and having committed his wife and children to the care of some of his *trusty subjects, disguised himself, and lived concealed in the little island of Athelney, in Somersetshire.* At length the Danes, finding they had no enemy to oppose them, seemed to grow negligent. Alfred, on this occasion, resolving to be satisfied of it, boldly entered the Danish camp in the disguise of a musician, and even staid there several days; then returning to his friends, his troops were secretly assembled, attacked the Danes, and routed them with great slaughter. Those who escaped fled to a castle, but were soon compelled to surrender to Alfred, who permitted them to depart, on condition that their leader, Guthrum, should embrace Christianity, to which they complied, and Alfred gave Guthrum the government of East Anglia, in Essex.

Alfred, once more seated on the throne, proved himself, with scarcely any exception, the best king that ever reigned. He founded the university of Oxford; divided England into shires and counties; established a national militia; encouraged learning and learned men; invented a way of measuring time by candles, which were made to burn eight hours each, having in his time no clocks or watches; and made the navy very respectable. He reigned twenty-nine years and a half, and died October 28, 901.

He was succeeded by his son, called Edward the Elder, who fought several battles with the Danes, and completely routed them; he afterwards marched against the Welsh, over whom he gained a decisive victory, and compelled the Welsh king, Rees ap Madoc, to sue for peace, and promise to pay an annual tribute for the future. He reigned 24 years, died in 925, and was interred at Winchester. He was succeeded by his son Athelstan, who obtained a great victory over the Danes in Northumberland, after which he reigned in tranquillity. He died in the year 941, and was succeeded by his brother, Edmund I. Soon after Edmund began his reign the Danes prepared for a revolt, and recovered Northumberland, Cumberland, and Mercia, but these places were again retaken by Edmund. He was stabbed at a feast in Gloucester, by Leolf, a robber, whom he had caused to be banished: he was succeeded by his brother Edred, in 948.

The Danes, according to their usual custom upon the accession of a new king, revolted, and gained over to their side Malcolm, King of Scotland; but Edred marching against them, obliged Malcolm to sue for peace, and to pay him

tipulated homage. He reigned nine years, died in 958, and was succeeded by Edwy, the son of Edmund.

In the reign of Edwy, Dunstan, a proud abbot, who pretended to be a saint, raised a faction against him, which became so powerful that Edwy was obliged to divide the kingdom with his brother Edgar. He died after a reign of about four years, and was buried at Winchester.

Edwy was succeeded by his brother Edgar, in 959, whose reign was one continued calm, without any wars or commotions; this was owing to his vast preparations both by sea and land, so that none dared to attack him; and without striking a blow, he obliged the kings of Wales, Ireland, and the Isle of Man, to acknowledge him for their sovereign.

In the time of Edgar, England was infested by wolves; and in order to extirpate them, Edgar, changed the tribute which the Welsh people used to pay in money into 300 wolves' heads, to be paid every year; this expedient, in a few years, effectually cleared the country, and there have been no wolves in England since, excepting those brought from abroad. He reigned 16 years, died in 975, aged 31, and was interred at Glastonbury. He was succeeded by his son Edward, who was murdered at the instigation of his mother-in-law.

Edward was succeeded by his brother Ethelred II. son of Edgar and Elfrida.

In his reign the Danes again invaded England; they at first landed at Southampton, in 981, and for ten years afterwards there was nothing but plunderings, conflagrations, murders, and every misery imaginable. At first he purchased their absence by a great sum of money, but soon after, all the Danes who resided in England, excepting those in East Anglia and Mercia, were by his orders massacred in one day, namely Nov. 13, 1002. Sweyn, King of Denmark, when he heard of this bloody act, declared he would never rest till he had revenged so monstrous an outrage. He therefore equipped a fleet of 200 ships, and came not for plunder as before, but to destroy the country with fire and sword. He soon arrived in England, made great havoc among the Britons, obliged them to pay him a large sum of money, and compelled Ethelred to take refuge in the court of his brother-in-law, Richard, Duke of Normandy, 1013.

Shortly after, Sweyn dying, the nobility invited Ethelred

to return ; but he did not long enjoy the throne, for Canute, the successor of Sweyn, proved to be as powerful an enemy as his predecessor.

Ethelred reigned thirty-seven years, died in 1016, and was succeeded by his son Edmund, sometimes called Edmund Ironside, on account of his hardy valour. Numerous contentions happened in this reign between the English and the Danes under Canute, who, with Edmund, agreed to a participation of the kingdom. Edmund, during his short reign, exhibited proofs of the most undaunted courage, invincible fortitude, consummate prudence, and sublime generosity. He was murdered in 1017, at Oxford, by two of his chamberlains, and was interred at Glastonbury, and thus made way for the succession of Canute the Dane to the crown of England ; and with Edmund the Saxon monarchy in a manner ended, having lasted 190 years from Egbert's establishment, 432 from the foundation of the heptarchy and 568 from the arrival of Hengist.

Canute the Great succeeded Edmund Ironside, and was proclaimed King of England in 1017 ; he divided England into four parts ; namely, Mercia, Northumberland, East Anglia, and Wessex, and made the government of England such, that every person should be treated alike.

It is said of him, that as he was walking one day by the sea-side at Southampton, and his flatterers were extolling him to the skies, and even comparing him with God himself, he, to convince them of their folly and impiety, caused a chair to be brought to him, and seating himself where the tide was about to flow, he turned himself to the sea, and said, " O sea, thou art under my jurisdiction, and the land where I sit is mine ; I command thee to come no farther, nor to presume to wet thy sovereign's feet." The tide coming as usual, he from thence took occasion to let his base followers know, that none but the King of Heaven, whom the sea and land obey, deserved the titles they impiously bestowed on him. After which, it is said, he would never wear a crown, but caused it to be put on the head of a crucifix at Winchester. He reigned eight years, died in the year 1036, and left three sons ; Sweyn, who had Norway ; Harold, England ; and Hardicanute. Denmark.

Harold died in 1039, without issue, in the fourth year of his reign, and was succeeded by his brother Hardicanute, who brought with him to England forty Danish ships ; and soon after he was crowned he laid a heavy tax upon the

PART VII. *or Youth's Instructor.*

nation to pay his fleet, which he sent back to Denmark, This occasioned great murmuring and discontent among the people.

Nor did the whole nation quietly submit to this tax, for the people of Worcester opposed it with great violence and two of the persons employed to collect it were killed which so incensed the king, that he sent the dukes of Wessex and Mercia, and the Earl of Northumberland, with their forces, against Worcester, who, after plundering the city for four days, burnt it to the ground.

He was brutally cruel and vindictive, and infamous for gluttony and drunkenness; he died suddenly, June 8, 1041, in the third year of his reign, as he was carousing at the wedding of a Danish lord at Lambeth.

The English rejoiced, and kept the day of his death as a holiday, for several centuries after, by the name of Hoptide, or Hog's tide. With him ended the monarchy of the Danes in England, after it had lasted about 26 years. but had harassed the kingdom 240 years.

Hardicanute was succeeded by Edward the Confessor, son of Ethelred and Emma, June 8, 1041, who had spent great part of his life in Normandy. During his reign he abolished for ever the tax called Danegelt, which amounted to £40,000 a year, and had been paid for 38 years; he built Westminster Abbey; and collected the Saxon laws and customs into one body, which were thence called by his name.

Edward was succeeded by Harold II. son of Earl Godwin, who had all the qualifications requisite for forming a great prince, but fell in his country's cause, at the battle of Hastings, after a turbulent reign of nine months and nine days; and with him totally ended the empire of the Anglo-Saxons, in England, which had begun in the person of Hengist, above 600 years before.

WILLIAM I.

William I. King of England and Duke of Normandy, was one of the greatest generals the eleventh century. He was born at Falaise, and was the natural son of Robert, Duke of Normandy, by Arlotte, a furrier's daughter. After the death of Robert, which happened in 1035, William, who was his only son, succeeded him. His relations, however, disputed the succession, but being favoured by Henry I. King of France, he triumphed over them, defeated Count D'Arques, took Maine, and carried the war into Anjou.

Some time after he paid a visit to Edward the Confessor, who treated him with great respect, and took a tour with him through England.

Edward the Confessor dying without issue, in 1065, appointed him his heir; on which William sent to demand the crown; and soon after landed at Pevensy, in Sussex, with a powerful army, and thence proceeding to Hastings, built a strong fort. Harold, the reigning prince, marched to oppose him, and a bloody battle ensued, the 14th of October, 1066, in which William obtained a complete victory, though he had three horses killed under him, and lost a great number of his troops; and Harold was slain, with many of the nobility, and about 60,000 soldiers. Yet, notwithstanding this victory, William could have little hopes of gaining the throne by right of conquest; he therefore pretended that he came to revenge the death of Prince Alfred, brother to King Edward; to restore Robert, Archbishop of Canterbury to his see; and to obtain the crown as his right, on account of its being bequeathed to him by Edward the Confessor. He cannot, therefore, be properly said to have obtained the crown by conquest, since these motives engaged many of the English in his favour.

William's passions were violent, but he had much wisdom and an equal share of dissimulation. He marched directly to London but on the way was met by a large body of Kentish men, each with a bough or branch of a tree in his hand. This army was headed by Stigand, the archbishop, who made a speech to the conqueror, in which he boldly demanded the preservation of their liberties; and let him know, that they were resolved rather to die than to part with their laws, and live in bondage.

William thought proper to grant their demands; he agreed to govern them by the laws of Edward the Confessor, and to suffer them to retain their ancient customs. Upon his coronation at Westminster, he was sworn to govern by the laws of the realm; and though he afterwards introduced some new forms, he preserved trials by juries and the borough laws.

The first act of sovereignty he exercised after his coronation was the seizure of Harold's treasure, which he found amassed at Winchester. Part of this he distributed among the principal officers of his army; part was given to the churches and monasteries; and a large share was sent to the pope.

He began his reign with such moderation as afforded a

happy omen to his subjects. He exhorted his principal officers to treat the English with humanity, and respect them as brothers. He issued orders throughout his army, forbidding his soldiers to attempt the chastity of the women, or commit the least outrage against the inhabitants, under the severest penalties. This specimen of his equity had a wonderful effect upon the English, who vied with each other in testifying their loyalty and esteem, by presenting him with large sums of money, which helped to defray the expense of the conquest; nor could they blame his conduct, when he divided among his followers the lands of all the noblemen who had appeared in arms against him.

He instituted the courts of chancery and exchequer; but at the same time disarmed his English subjects, and forbade their having any light in their houses after eight o'clock at night, when a bell was rung, called *Curfew*, or *Coverfire*, at the sound of which all persons were obliged to put out their fires and candles. He repulsed several invasions; obliged the Scots to preserve the peace they had broken; compelled the Welsh to pay him tribute; refused to pay homage to the pope; built the tower of London; and caused all public acts to be made in the Norman tongue. He likewise caused all England to be surveyed and rated, and had the men numbered in a work called *Doomsday-book*, which is still extant.

He resolved to chastise the French, who invaded Normandy, and after that to reduce his son Robert: but Robert no sooner found that he was engaged with his father, than he dutifully submitted to him, notwithstanding his being victorious. Some time after, William declared war against Philip I. King of France; burnt Mantes, and ravaged the country with fire and sword to the very gates of Paris; but approaching too near the flames of Mantes, the heat of the fire, together with the warmth of the season, threw him into a fever which being increased by a fall from his horse in his return to Roan, he died at a village near that city, the 9th of September, 1087, in the 64th year of his age, after a reign of fifty-two years in Normandy, and twenty-one in England. He was interred at Caen in Normandy.

William was a prince of great courage, capacity, and ambition; he was politic, cruel, vindictive, and rapacious; stern and haughty in his deportment; reserved and jealous in his disposition. He was fond of glory, and, though parsimonious in domestic affairs, delighted in pomp and ostentation.

tation. His aspect was noble; severe, and imperious, his stature tall and portly, his constitution robust, and his strength so great, that few men of that age could bend his bow or handle his arms.

WILLIAM II.

William II. surnamed *Rufus*, or *Red*, from the colour of his hair, and his florid complexion, was the second surviving son of William the Conqueror, and succeeded his father the 27th of September, 1087. He was then 30 years of age; and at the same time Robert, his elder brother, succeeded, by his father's will, to the duchy of Normandy; but he resolved to assert his right of primogeniture to the crown of England; and several of the Norman nobility espoused his cause. William, however, defeated a body of his troops in Kent, and soon after prevailed on him to conclude a peace.

The two brothers then made war on Henry, their youngest brother, whom they besieged in Mount St. Michael, where the king riding one morning unattended, fell in with a party of Henry's soldiers, and endeavoured to force his way through them: but was dismounted, and a soldier was going to dispatch him, when he saved his life by exclaiming, "Hold, fellow, I am the King of England." Upon this the man dropped his sword, raised the monarch from the ground, and received from him the honour of knighthood.

The brothers being soon reconciled, William turned his arms against Scotland, and defeated the army of King Malcolm, who with his son, had been killed just before in an ambush laid by Mowbray, governor of Northumberland. But Mowbray, finding, soon after, that the king neglected to reward his services, joined with other noblemen to set the crown on the head of Stephen, grandson to William the Conqueror. The king marched into Yorkshire, reduced Bamborough, took Mowbray prisoner, and put an end to the rebellion. But while he was hunting in the New Forest, he was accidentally wounded by an arrow, shot by Walter Tyrrel, his particular favourite, and immediately expired, on the 2nd of August, 1100, aged 44, after a reign of thirteen years. It is said, so little respect was paid to his body, that it was conveyed in a coal-cart to Winchester, and was soon after interred, in a very private manner, in the church of St. Swithin.

William was equally void of learning, principle, and humanity; haughty, passionate brutal, profligate, and un-

grateful; a scoffer at religion, a scourge to the clergy; vain-glorious, talkative, rapacious, lavish, and dissolute; and an inveterate enemy to the English, though he owed his crown to their valour and fidelity, when the Norrnan lords intended to expel him from the throne. He lived in a scandalous commerce with prostitutes, professing his contempt for marriage. Having no legitimate issue, the crown devolved to his brother Henry.

William at the time of his death, had the archbishopric of Canterbury, the bishoprics of Winchester and Salisbury, and twelve abbeys, in his hands; and in his reign he disposed of the bishoprics and monasteries to those who bid most for them.

HENRY I

Henry I. surnamed *Beauclerc*, on account of his great learning, was the son of William the Conqueror, and the youngest brother of William Rufus and Robert. His engaging person and address, his courage, learning and eloquence, have been highly celebrated. Robert being in Palestine when William Rufus was killed, in 1100, Henry took advantage of his absence, and caused himself to be crowned King of England, on August 5, 1100; but Robert, at his return, was acknowledged Duke of Normandy, and landed at Portsmouth to make good his right to the crown of England. However, Henry came to an agreement with him, by consenting to pay him an annual tribute of 3000 marks.

This tribute, however, being butrill paid, they rekindled the war in a short tim after; when Henry landed in Normandy, rendered himself master of that duchy, after the battle of Tinchebray, fought on the 27th of September, 1106, in which Robert was defeated and taken prisoner. After which Henry had the cruelty to cause his eyes to be put out, and confined him twenty years in Cardiff Castle, in Glamorgan-shire. He died the 1st of December, 1135, aged 68, leaving his crown to Maud, or Matilda, his daughter, but was succeeded by Stephen, his nephew.

Henry was of a middle stature, and robust make, with dark brown hair, and blue serene eyes. He was facetious, fluent, and affable to his favourites. He had naturally a good capacity, which was so much improved and cultivated that he acquired the surname of *Beauclerc*, by his learning. He had great courage and fortitude, but was vindictive cruel, rigid, and implacable. He was temperate in his diet

but a voluptuary in his amours, which produced a numerous family of illegitimate children. His Norman descent inspired him with a contempt for the English, whom he oppressed by extravagant exactions, which not only enabled him to maintain expensive wars upon the continent, but he died the richest prince in Europe.

STEPHEN.

Stephen, surnamed *Blois*, was the son of Stephen, Earl of Blois, by Adela, daughter of William the Conqueror, and succeeded his uncle, Henry I. the 22nd of December, 1135, in the 31st year of his age, though the Empress Maud, daughter of Henry I. was then living. He endeavoured to strengthen himself against her, by taking a foreign army into pay, and by signing a charter, in which he acknowledged his being elected king by the clergy and people. He also confirmed the rights of the church, abolished the forest laws, and revived the favourite laws of Edward the Confessor; but not being able to reward the nobles according to their expectations, a war was soon raised against him, and he was obliged to conclude a disadvantageous peace with the inhabitants of Wales and Scotland. He then fell ill of a lethargy, and the Normans, imagining that he was dead, invited Theobald, his elder brother, to seize his duchy; however, Stephen recovering, went over into Normandy, expelled his brother, and then returned to England, where the friends of Maud were ready to declare in her favour, assisted by the king of Scotland; but after the Scots had ravaged Northumberland, and the barons had fortified themselves in the southern counties, Stephen reduced the castles of the latter, invaded Scotland, and compelled King David to conclude another peace with him.

He now wore the crown with great tranquillity for some time; but being jealous of the power of the clergy, he seized the castles belonging to the bishops of Salisbury, Lincoln, and Ely; upon which the Bishop of Winchester, legate of England, and the king's own brother, became his most inveterate enemy. The clergy, who wanted not only castles, but garrisons, also made their ambition the cause of the people: and the Empress Maud took this opportunity of personally asserting her right to the throne.

England was now torn by all the rage of civil war, while the people were plundered by both parties. The King faced the storm with a noble fortitude, he besieged the empress in Wallingford, pursued her to Lincoln, and gave

battle to the Earl of Gloucester before that city, when, after a great effusion of blood, the earl was victorious; and the king, having broken his battle-axe and sword in pieces by the force of his blows, was knocked down on his knees with a stone before he could be taken; after which he was confined in Bristol Castle, and ignominiously loaded with irons.

While Stephen was in prison the legate excommunicated his adherents; the Duke of Anjou seized upon Normandy; and the sovereignty of Maud was every where acknowledged; but on her behaving with great haughtiness, and refusing to mitigate the severity of the Norman laws, a revolt ensued, and she was obliged to quit London. The legate, whom she had disobliged, now turning sides again, excommunicated her party; and Stephen being set at liberty, was every where successful, till the empress and her son Henry were obliged to retire to Normandy.

The young prince soon after landed an army in England, in order to obtain the crown, but in 1153 Stephen concluded a peace with him; and upon condition of enjoying the crown during his life, consented that Henry should succeed to it at his death. Stephen died the 25th of October, 1154, in the 50th year of his age, and the 19th of his reign.

Stephen was a prince of great courage, fortitude, and activity; and would have been beloved by his people, had he not been harassed by the efforts of a powerful competitor, which obliged him to take such measures for his safety as were inconsistent with the dictates of honour. His necessities compelled him to infringe the charter of privileges which he granted at his accession. His vices as a king seem to have been the effect of the troubles in which he was involved; for as a man he was brave, open, and liberal; and during the short calm that succeeded the tempest of his reign, he travelled through the kingdom, published an edict to restrain all rapine and violence, and disbanded the foreign mercenaries who had preyed so long upon his people.

HENRY II.

Henry II. son of Geoffrey Plantagenet, and the Empress Maud, or Matilda, the daughter of Henry I. succeeded Stephen, the 20th of December, 1154, in the 23rd year of his age. As the son of Geoffrey Plantagenet, he inherited the French provinces of Anjou, Touraine, and Maine; and afterwards, by his marriage with Eleanor, obtained Poitou, Saintonge, Guienne, and Gascony. In his person the Nor

man and Saxon blood were united, and in him began the race of the Plantagenets, which ended with Richard III.

In 1172 Henry sailed with a numerous fleet to Ireland, and landed at Waterford; all the Irish princes voluntarily swore allegiance to him, so that he became master of the kingdom without bloodshed, and divided great part of the country among the English nobles who attended him in this expedition; and from them sprung some of the principal families now in Ireland. The king had for some years before met with continual disturbance from the arrogance of Thomas Becket, whom he had raised from a mean station to the see of Canterbury; but at last four knights, thinking to please his majesty, murdered that insolent prelate. What is more extraordinary, the pope's legate prevailed on the king to do penance, by going barefoot to Becket's shrine, and to be scourged there by the Augustine monks, who gave him eighty lashes on his naked back.

Henry was brave, learned, prudent, polite, generous, and of a mild disposition; but these virtues could not exempt him from suffering the greatest vexations even in his own family. Lust was his predominant passion; and Eleanor his queen, being jealous of Rosamond (Lord Clifford's daughter) who was his mistress, and whom he kept at Woodstock, in a labyrinth, built to secure her from the queen's rage, is said to have found means to dispatch her by poison; and the young princes his sons, being joined by several of the nobility and assisted by the kings of France and Scotland, raised a great rebellion.

King Henry, however, took the King of Scotland prisoner, and afterwards not only restored the young princes to favour, but pardoned all the revolters; however, he obliged the King of Scotland to pay him homage for his kingdom. Henry was so mortified at the disobedience of his sons, that through grief he became ill at Chinon, in Touraine; and perceiving his end draw near, gave orders for his being carried into the church, where he expired before the altar, on the 6th of July, 1189, in the 57th year of his age, and the 35th of his reign. His ungrateful attendants stripped his body, and left it naked in the church; but it was afterwards interred at Fontevrand, in Anjou.

RICHARD I.

Richard I. surnamed *Cœur de Lion*, or *Lion's heart*, succeeded his father, Henry II, the 6th of July, 1189, at which time he was Count of Poitou, and Duke of Normandy. He

commenced his reign by selling the crown lands, and exacting money on various pretences, in order to go to the holy war. He undertook his expedition in 1190, when he embarked with his whole army for France, where he joined the forces of the French king, and they having ratified their alliances, marched together with their combined forces, which consisted of 100,000 men, as far as Lyons, where they separated; and Richard continuing his march to Marseilles, re embarked there for Sicily, where the two kings spent the winter. And the next spring, continuing their voyage, Richard with his fleet was driven on shore in the island of Cyprus; where Isaac, the king of the island, treating the English with inhumanity, Richard took him and his daughters prisoners; loaded the Cyprian monarch with silver chains; and having thus conquered the island of Cyprus, exchanged it with Guy Lusignan for the titular kingdom of Jerusalem.

Richard afterwards gained a complete victory over Saladin, took the city of Acre, and made himself master of Ascalon, Joppa, and Cæsarea: but being deserted by Philip Augustus, King of France, and the dukes of Burgundy and Austria, he could not continue his conquests; therefore, on hearing that his brother John was aspiring to the throne of England, he concluded a truce of three years with Saladin, and embarked in order to return to his dominions; but having the misfortune to be shipwrecked near Aquileia, he resolved to pursue his journey in disguise through Germany. After several difficulties, he was taken, when asleep, in a mean lodging near Vienna, by order of Leopold, Duke of Austria, whom he had disoblged at the siege of Acre; and that duke delivered him, up the following year to the Emperor Henry VI. who, after treating him with great indignities, obliged him to pay 150,000 marks for his ransom, which his loyal subjects cheerfully raised by a voluntary tax.

He then returned to England, after an absence of four years, of which he had passed fifteen months in prison. He soon suppressed the party raised by his brother John, confiscated his lands, and then raising a numerous army, invaded France, and afterwards, at the battle of Blois, took all the archives of the kingdom, and continued the war against Philip, with various success, for five years, after which a truce was concluded. But a gentleman of Limosin having discovered a treasure upon his estate, Richard laid claim to it, as sovereign of Guienne; and besieging the gentleman in the Castle of Chalus, was wounded by an

arrow in the shoulder, of which he died eleven days after, on the 6th of April, 1199.

Richard had a tall, graceful, fair, and well proportioned person. His eyes were blue and sparkling, and his hair of a bright yellow, inclining to red.

He had prodigious strength of body, and amazing courage and intrepidity; his penetration was uncommon; he possessed a fund of manly eloquence; and was admired for his talent at rapartee. He was an illustrious warrior, but exceedingly ambitious, proud, choleric, cruel, vindictive, debauched, and avaricious; and his love of glory made him neglect the happiness of his people. The Reverend Mr. Grainger observes, that the saint-errantry of Richard, who sacrificed all other views for the glory of the crusade, is an instance among a thousand others that offensive and enterprising valour may be a worse quality than cowardice itself; and that he was but eight months in his kingdom during a reign of ten years. He has been aptly compared to a lion, a species of animal which he resembled not only in his courage, but likewise in his ferocity.

In his time the city of London began to assume a new form with respect to its government; to have a mayor, and to be divided into several corporations or societies, now termed companies.

JOHN.

John, surnamed *Sans Terre*, or *Lackland*, was the fourth son of King Henry II. and was born at Oxford, in 1166. He ascended the throne in 1199, after the death of his brother Richard I. though Arthur, Duke of Brittany, to whom it lawfully belonged, as being the son of Geoffrey, his eldest brother, disputed it with him; but the young prince, being taken by surprise at Mirabeau, in Brittany, in 1202, was murdered in prison. Upon this, Constance, the mother of Arthur, implored the assistance of Philip Augustus, King of France, who promised to strip him of all the lands he possessed in France; and Pope Innocent III. not only excommunicated him, but absolved all his subjects from their oath of allegiance.

At length the Pope sent Pandulph his nuncio into England, who offered the king the pope's protection, on condition of his swearing to obey the pontiff, and to resign his crown to him. To this John consented, and repaired to Dover church, in the presence of the priests and people, took off his crown, disrobed himself, and laid all his ensigus

of royalty at the feet of the nuncio, who was seated on a throne. After this, he signed a paper, by which he resigned the kingdom of England, with the lordship of Ireland, to the holy see; and bound himself as a vassal, to pay 700 marks annually for England, 300 for Ireland; and then did homage to the pope in the person of his nuncio, who kept the crown and sceptre five days in his possession.

The barons of England, fired with indignation at this meanness, and oppressed by the heavy taxes with which he loaded them, had recourse to arms, and demanded a re-establishment of the laws of Edward the Confessor, and a renewal of the charter of Henry I. which being refused by the king, they chose Robert Fitzwalter for their general, marched to London, and besieged him in the Tower. The king complied when he could no longer resist, and agreed to meet the barons in Runnymede, or the Mead of Counsel, between Staines and Windsor: and there, being unable to obtain supplies from his people, and finding himself too weak to withstand his enemies, granted whatever they desired, thence rose that famous charter of liberties, called *Magna Charta*, which he was obliged to sign, and also the charter of the liberties of the forest, charters that have since been esteemed the foundation of the English liberties.

The king, however, though he had ratified these charters with a most solemn oath, brought over an army from Flanders, and ravaged the whole kingdom. Upon this the barons applied for assistance to the King of France, promising the crown to his son Louis if he would come with a force sufficient to rescue them from the tyranny of John.

Louis soon came to their assistance, landed at Sandwich, and took Rochester, while John retired to Winchester, having prevailed on the pope to excommunicate both the French king and the English barons; but being deserted by some of his mercenaries, the dauphin besieged Dover, while the barons invested Windsor; after which the country was ravaged by both parties, who came to no engagement. At length grief and fatigue threw the king into a fever, which is said to have been heightened by his eating of peaches and drinking new ale. He died at Newark, October 18, 1216, in the 51st year of his age, and the 17th of his reign. Others say that he was poisoned by a monk.

John was in his person taller than the middle size, of a good shape, and agreeable countenance. With respect to his disposition, it was strongly delineated in the transactions of his reign. If his understanding was contemptible, his

heart was the object of detestation: we find him slothful, shallow, proud, imperious, rash, cruel, vindictive, perfidious, cowardly, libidinous, and inconstant; abject in adversity, and overbearing in success; contemned and hated by his subjects, over whom he tyrannized to the utmost of his power; abhorred by the clergy, whom he oppressed with exactions; and despised by all the neighbouring princes of Europe.

Though he might have passed through life without incurring such a load of odium and contempt, had not his reign been perplexed by the turbulence of his barons, the rapaciousness of the pope, and the ambition of such a monarch as Philip Augustus, yet his character would never have afforded one quality that would have exempted him from the disgust and scorn of his people. However, it must be acknowledged that his reign was not altogether barren of laudable transactions. He regulated the form of the civil government in the city of London, and several other places in the kingdom; he was the first who coined sterling money; introduced the laws of England into Ireland, and granted to the Cinque-ports those privileges of which they are still possessed.

HENRY III.

Henry III. King of England, commonly called *Henry of Winchester*, was born October 1, 1207, and succeeded his father, King John, the 28th of October, 1216, when he was only nine years of age. Louis, the dauphin of France, afterwards Louis VII. who was called in by the barons against King John, was then in England; but having received a large sum of money, returned into France. When Henry came of age, he began by exacting large sums of money, and annulling the two sacred charters granted by his father. He landed in Brittany with a numerous army, in order to recover the British dominions in France; but, spending his time in diversions, he shamefully returned, after having spent all his treasure. Afterwards renewing the war, he lost all Poitou, and then concluded a peace with Louis for five years, to purchase which Henry agreed to pay him 5000 pounds annually.

The king paid no regard to the constitution of England; but he met with many mortifications from his parliament and people, who at length obliged him to renew the two charters; which was done in Westminster Hall in the following manner. The peers being assembled in the presence

of the king, each holding a lighted taper, the Archbishop of Canterbury denounced a terrible curse against those who should violate the laws, or alter the constitutions of the kingdom: then the charters were read aloud, and confirmed by the king, who all this time kept his hand upon his breast; after which every one threw his taper on the ground; to raise a great smoke, and wished that those who violated the charters might smoke in hell. After this, the parliament granted him a subsidy for suppressing an insurrection in Guienne. He soon reduced that province, and returned to England, where he renewed his exactions.

The people being still oppressed, and the barons finding that Henry could not be bound by the most solemn oaths, undertook to reform the government; accordingly, commissioners were chosen by the king and the barons, and articles agreed on, which the king again broke. At last they came to an open war, when the decisive battle was fought near Lewes, in Sussex, in which the king's army was defeated, and himself, Prince Edward, and the King of the Romans, taken prisoners. But afterwards the earls of Liecester and Gloucester quarrelling, the latter joined Prince Edward, who had escaped from his keepers, and uniting their forces, marched against the Earl of Leicester, whom they defeated and slew. The king was then set at liberty; but peace was not restored till some time after, when Prince Edward engaged in a crusade, and went to the Holy Land. His father, King Henry, did not live to see him return, but died at London, on the 16th of November, 1272, aged 65, in the 56th year of his reign, and was buried in Westminster Abbey. He had nine children, of whom only two sons, Edward and Edmund, and two daughters, Margaret and Beatrix, survived him.

Henry was of a middle size, and robust make, and his countenance had a peculiar cast from his left eyelid, which hung down so far as to cover part of his eye. He was a prince of very mean talents; irresolute, inconstant, and capricious; proud, insolent, and arbitrary; arrogant in prosperity, and abject in adversity; profuse, rapacious, and choleric, though destitute in liberality, economy, and courage. Yet his continence was praiseworthy, as well as his aversion to cruelty; for he contented himself with punishing the rebels in their effects, when he might have glutted his revenge with their blood. He was prodigal even to excess, and therefore always in necessity. Notwithstanding the great sums he levied from his subjects, and though his

occasions were extremely pressing, he could not help squandering away his money upon worthless favourites, without considering the difficulty he always found in obtaining supplies from parliament.

EDWARD I.

Edward I. King of England, surnamed *Long-shanks*, was the son of Henry III. and born at Winchester, June 16, 1230. He carried on a crusade against the Saracens, where, with only 10,000 Englishmen, he struck a general panic into the infidels. He there narrowly escaped destruction, being wounded by an assassin in the arm with a poisoned dagger ; and it is said that he owed his life to the affection of his queen Eleanor, who sucked the venom out of the wound. While he was on his return from Palestine he heard of the death of his father, which happened in 1272 ; and arriving in England with his queen, they were both crowned on the 9th of August, 1274. He began his reign by confirming Magna Charta, and by making a strict enquiry into the affairs of the kingdom. He then defeated and slew Llewellyn, Prince of Wales, who had revolted ; and afterwards summoning a parliament at Ruthen, it was there resolved that Wales should be united to England : when some of the Welsh nobles telling' the king that he would never peaceably enjoy their country till they were governed by a prince of their own nation, he sent for the queen to lie in at Carnarvon ; where being delivered of a prince, the states acknowledged him for their sovereign ; and since that time the eldest sons of the kings of England have borne the title of Prince of Wales. Soon after Queen Eleanor dying at Grantham, in Lincolnshire, Edward erected a cross at every place where the corpse rested in the way to Westminster.

Edward then carrying his arms into Scotland, took Berwick, Dunbar, and Edinburgh ; and John Baliol, their king, repairing to Edward, renewed his oath of fidelity, and put the whole kingdom in his power. But while Edward was endeavouring to recover some dominions which he had lost in France by treachery, the brave William Wallace rose up in the defence of his country ; and having suddenly dispossessed the English of all the strong places they held, was declared regent of the kingdom ; on which Edward hastily returned from France, advanced into Scotland, at the head of a powerful army, and defeated Wallace, who several years after was betrayed into the hands of the English, and sent

to London, where that great hero suffered the death of a traitor. Edward was seized with a dysentery, and died at a place called Burgh on the Sands, in Cumberland, on July 7 1307, in the 68th year of his age and the 35th of his reign and was interred in Westminster Abbey. He was a prince of a very dignified appearance, tall in stature, regular and comely in his features, with deep piercing black eyes, and of an aspect that commanded reverence and esteem. His constitution was robust; his strength and dexterity perhaps unequalled in his kingdom; and his shape was unblemished in all other respects but that of his legs, which are said to have been too long in proportion to his body, whence he derived the epithet of Long-shanks. In the qualities of the head he equalled the greatest monarchs who had sat on the English throne; he was cool, penetrating, sagacious, and circumspect. The remotest corners of the earth resounded with the fame of his courage; and all over Europe he was considered as the flower of chivalry. Nor was he less consummate in his legislative capacity than eminent for his military prowess. He new modelled the administration of justice, so as to render it more sure and summary; he fixed proper bounds to the different courts of jurisdiction; settled a new and easy method of collecting the revenue; and established wise and effectual regulations for preserving peace and order among his subjects. Yet, with all these good qualities, he cherished a dangerous ambition, to which he did not scruple to sacrifice the good of his country. That he was arbitrary in his disposition, appears in many instances of his reign, particularly that of seizing for his own use the merchandise of his subjects. The cruelty of his nature was manifested in every expedition he undertook, either in Wales or Scotland. Though he is celebrated for his chastity and regular deportment, there is not, in the whole course of his reign, one instance of liberality or munificence. He had great abilities, but no genius; and was an accomplished warrior, without the least spark of heroism.

EDWARD II.

Edward II. King of England, was born at Carnarvon, April 25, 1284, and succeeded his father, Edward I. in 1307, at 23 years of age. He recalled Piers Gaveston, the debaucher of his youth, whom his father had banished. Then marrying Isabella of France, the daughter of Philip the Fair, they were both crowned at Westminster on the 24th of February, 1308. His ridiculous fondness for Gaveston

occasioned innumerable disputes, till at length the barons had recourse to arms, and Gaveston was beheaded. An accommodation was afterwards effected between the king and the barons, and peace restored in 1312. The same year the queen was delivered of a son, who was named Edward. In the mean time the Scots obtained three victories over the English, and made themselves masters of every place in Scotland. This weak prince raised the two Spencers, father and son, to the summit of power ; who being banished by the parliament, the king levied an army, took some castles from the barons, and recalled his two favourites.

Some time after Edward invaded Scotland ; but wanting provisions, he returned without striking a blow ; on which Bruce, King of Scotland, pursued him to York ; and after having destroyed 200,000 of the English, consented to a peace for thirteen years. The two Spencers soon incurred the general hatred, and Queen Isabella flying to France with her son, the nobility sent for her ; when landing, and proceeding toward London with a numerous army, the king fled into the west ; she still pursued him, and he set sail for Ireland, but was driven back into Wales, and being taken, was sent prisoner to the queen. Hugh Spencer, the father, was hanged and quartered without a trial, and the young Spencer was hanged on a gibbet fifty feet high.

The queen was entirely governed by Roger Mortimer, Earl of March, whom she took to her bed : and the king being obliged to resign the crown in 1327, his son Edward was proclaimed king. After these transactions, the late sovereign was treated with the greatest indignities, and at last inhumanly murdered in Berkley Castle ; for some assassins having covered him with a feather bed, held him down, while others conveyed a horn pipe up his body, through which they thrust a red hot iron, and thus burnt his bowels. His body was buried in a private manner in the abbey church at Gloucester, and it was given out that he died a natural death.

Thus perished Edward II. after having atoned by his sufferings for the errors of his conduct. He resembled his father in the accomplishments of his person, as well as in his countenance ; but in other respects he seems to have inherited only the defects of his character, for he was cruel and illiberal, without his valour or capacity. He had levity, indolence, and irresolution, in common with other weak princes ; but the distinguishable foible of his character was that unaccountable passion for the reigning favourite,

to which he sacrificed every other consideration of policy and convenience, and at last fell a miserable victim. Yet his bitterest enemies never alleged that any thing unnatural entered into the composition of that singular attachment which he expressed for Gaveston and the younger Spencer. In this reign there was the most terrible earthquake that had ever been felt in England; and a dreadful famine, which lasted three years, and destroyed a vast number of people.

EDWARD III.

Edward III. was born at Windsor, November 15, 1312, and was placed on the throne the 26th day of January, 1327, at fourteen years of age, while his father, Edward II. was living. Though a regency was appointed by the parliament, the queen and Roger Mortimer had the sole authority; and, influenced by them, the young king not only renounced all pretensions to Scotland, but gave his sister in marriage to David Bruce, King of the Scots; yet afterwards becoming sensible of the queen's ill conduct, he confined her for life, and caused Mortimer, Earl of March, to be hanged at Tyburn. He then broke the truce with Scotland, invaded that kingdom, and obliged King David to fly with his queen into France, when he set up Edward Baliol, son of John Baliol, in his room. The King of England marched an army to lay siege to Berwick, which was still in King David's hands. The Regent of Scotland advanced with a great army to its relief; but Edward met him at Hallidown-hill, and in a bloody battle, A. D. 1333, entirely routed him; after which Berwick surrendered, and was annexed for ever to the crown of England. However, the Scots drove Baliol out of the kingdom; upon which Edward marched with a numerous army in 1335, and attacked Scotland by sea and land, whereupon they submitted. Edward now laid claim to France; for Charles, his mother's brother, dying, Philip of Valois had possessed himself of the kingdom, alleging the Salic law: but Edward asserted that the Salic law, in excluding females from the succession, did not exclude their male issue; on which he grounded his title. His first campaign passed without bloodshed, but he took the title of King of France, and quartered his arms with the fleurs de lis, adding the motto, *Dieu et mon Droit*, or, God and my Right. However, in his next attempt, he defeated the French fleet. He then besieged Tournay, but being called home to oppose the Scots, concluded a truce for one year with Philip, King

of France. In the next campaign he ravaged all the country up to the walls of Paris, and his son, the *Black Prince of Wales*, at sixteen years of age, won the glorious battle of Cressy. Six weeks after this, Queen Philippa defeated the Scots, and took King David prisoner. These memorable victories were obtained in 1346. Edward then laid siege to Calais, and having reduced it by famine, returned to England. He soon after sent the *Black Prince*, who after taking several towns, totally routed the French army, commanded by King John, who had succeeded Philip; and in this memorable battle, which was fought near Poitiers, took the king, many nobles, and a multitude of private men, prisoners, though the French army was six times as numerous as the English. Thus Edward had the honour of having two kings his prisoners at the same time, John of France, and David Bruce, King of Scotland. The King of Scotland, who resided at Odiham, in Hampshire, was afterwards ransomed for 100,000 marks; and the French king, who lived at the Savoy, agreed to give for his ransom 500,000 pounds, and a considerable extent of country.

Charles, King of France, afterwards carried on a war with Edward, when the English were driven from all the places they had conquered, except Calais. However a truce was concluded between the two crowns in 1374.

On June 8, 1376, died Edward, Prince of Wales, the delight of the nation, in the 46th year of his age. He was called the *Black Prince* from wearing black armour. The parliament attended his corpse to Canterbury, where he was interred.

King Edward distinguished himself by instituting the Order of the Garter; and died at Richmond in Surry, June 21, 1377, in the 65th year of his age, and the 51st of his reign, and was interred in Westminster Abbey.

Edward III. was doubtless one of the greatest princes that ever swayed the sceptre of England, whether we consider him as a warrior or a lawgiver, a monarch or a man. He was tall, majestic, and finely shaped, with a piercing eye, and aquiline visage. He excelled all his contemporaries in feats of arms, or personal address. He was courteous, affable, and eloquent; of a free deportment, and agreeable conversation, and had the art of commanding the affection of his subjects, without seeming to solicit popularity. He was a constitutional knight-errant, and his example diffused the spirit of chivalry through the whole nation. The love of glory was certainly the predominant passion of Edward,

to the gratification of which he did not scruple to sacrifice the feelings of humanity, the lives of his subjects, and the interest of his country. And nothing could have induced or enabled his people to bear the load of taxes with which they were encumbered in his reign, but the love and admiration of his person, the fame of his victories, and the excellent laws and regulations which the parliaments enacted with his advice and concurrence.

RICHARD II.

Richard II. King of England, was the son of Edward the Black Prince, and was born at Bourdeaux, January 6, 1366. He succeeded his grandfather, Edward III. the 21st of June, 1377, at eleven years of age; when the parliament appointed several governors to the king, and ordered that his three uncles, with some of the nobility, should be regents of the kingdom. A truce which had been agreed to with France being now expired, the French sent a fleet to ravage the coasts of England, and the regents ordered out a fleet to oppose them. The King of France also prevailed on Robert II. King of Scotland, to invade England; but the French King dying, the military preparations were suspended. In 1380, a poll tax being raised on all persons above fifteen years of age, for the assistance of Ferdinand, King of Portugal, against John, King of Castile, it was levied with the greatest rigour and brutality by the Collectors; on which a rebellion was raised, and 100,000 men appeared in arms, headed by Wat Tyler, a tiler of Deptford, and Jack Straw, who committed innumerable disorders, and entered London without opposition; but William Walworth, the mayor, killed Wat Tyler with a blow of his sword, and this great army was easily dispersed. The kingdom soon after becoming greatly exasperated at the ridiculous fondness shewn by the king for his new favourites, Robert de Vere, Earl of Oxford, and Michael de la Pole, a merchant's son, whom he had created Earl of Suffolk, the parliament refused to grant the supplies, unless he dismissed them from his service. But though the king said, "that to please the parliament he would not turn out the meanest scullion in his kitchen," and sent his chancellor to order them to grant the desired subsidy, he was obliged to part with his favourites, and to admit of fourteen commissioners to take care of the public affairs jointly with himself. The parliament were, however, no sooner dissolved, than they were recalled, and the king sent orders to the sheriffs, to let no

representatives be chosen but what were in his list. He also endeavoured to raise an army to chastise his uncle, the Duke of Gloucester, and the earls of Arundel, Warwick, Derby, and Nottingham, who were enemies to his favourites, and were considered as the protectors of the people : but these lords speedily levying forces, defeated the Earl of Oxford, who had been made Duke of Ireland ; when the king took refuge in the Tower, where the next year he answered the complaints of the lords with a shower of tears ; consented to the banishment of his favourites, who were accordingly sent into exile ; and repeated his coronation oath. In 1392, the Londoners refusing to lend the king a sum of money, he took away their charter, and removed the court of justice to York. Anne of Luxemburgh, the emperor's daughter, and the king's first wife, dying in 1394, he, in 1396, married Isabella, the daughter of Charles VI. King of France, who was only seven years of age, when a truce was concluded for twenty-eight years. Richard, however, extorted money from his subjects, and for inconsiderable sums yielded Cherbourg to the King of Navarre, and Brest to the Duke of Brittany. He ordered the Duke of Gloucester to be seized and conveyed to Calais, where he was privately strangled ; and some of the nobility were beheaded, and others banished. The Scots ravaged the borders of England, the Irish revolted, and the merchant ships were plundered with impunity by the corsairs of Holland. Seventeen counties were condemned as guilty of treason, and the estates of all the inhabitants were adjudged to the king, for granting assistance to the Duke of Gloucester ; but whilst he was employed against the malecontents in Ireland, a rebellion was raised in his absence, and at his return he was obliged to shut himself up in Conway Castle in Wales. He soon after submitted to Henry, Duke of Lancaster, and was sent to the Tower ; when a parliament being called, he was solemnly deposed, and Henry proclaimed king on the 30th of September, 1399 ; after which Richard was removed to Pontefract Castle in Yorkshire ; but on the 14th of February, 1400, Sir Pierce Exton, with eight ruffians, undertook to murder him, hoping thereby to please King Henry IV. and rushed into the room where he was, when Richard bravely wrested a pole-axe from one of the assassins with which he slew four of them ; but Exton, mounting on a chair behind him, struck him on the head with such violence that he dropped down dead, in the 33rd year of his age, after a reign of twenty-two years, and wa-

interred at King's Langley, in Hertfordshire; but his body was afterwards removed to Westminster Abbey by order of Henry V.

Richard II. had a very graceful person, and was of a sprightly disposition. He was, however, a weak, vain, frivolous, and inconstant prince; a dupe to flattery, and a slave to ostentation. He was idle, profuse, and profligate; and though brave by starts, naturally pusillanimous and irresolute. His pride and resentment prompted him to cruelty and breach of faith, while his necessities obliged him to fleece his people, and degrade the dignity of his character and station. He had no issue by either of his two marriages.

HENRY IV.

Henry IV. Duke of Lancaster and Hereford, was born in 1367, and proclaimed king after the deposition of Richard II. on the 30th of September, 1399. He was the eldest son of John of Gaunt, Duke of Lancaster, third son of Edward III. He had not a just claim to the crown, which of right belonged to Edward Mortimer, Earl of March, then Duke of York, the descendant of Lionel, Duke of Clarence, the second son of Edward III.; which occasioned the wars between the houses of York and Lancaster, under the device of the white and red rose. The next year the dukes of Exeter, Surry, and Albemarle, the earls of Salisbury and Gloucester, the Bishop of Carlisle, and Sir Thomas Blount, the friends of Richard, formed a conspiracy, in order to assassinate Henry, and restore Richard to the throne: but being discovered, and their whole scheme frustrated, they assembled an army of 40,000 men, and set up Maudlin, a priest, whose person resembled Richard, to pretend that he was Richard himself; but in this they also failed; most of their leaders being taken and beheaded, and Maudlin being hanged at London. This conspiracy hastened the death of the unfortunate King Richard, who was soon after basely murdered at Pontefract. In 1402 Henry caused Sir Roger Clarendon, the natural son of Edward the Black Prince, and several others, to be put to death for maintaining that Richard was alive. The same year he married Joanna of Navarre, widow of the Duke of Brittany.

About this time the Scots invaded England, under the Earl of Douglas, but were defeated at Hallidown-hill by the Earl of Northumberland, and his son Henry Hotspur, with

the loss of above 10,000 men ; and in this victory several earls, and many other persons of consequence were made prisoners ; but the king ordering Northumberland to deliver up the prisoners into his hands, the earl was so exasperated that he, with Henry Percy, surnamed Hotspur, his son, and other lords, agreed to crown Edmund Mortimer, Earl of March, whom Owen Glendower kept prisoner in Wales. The rebel army was encamped near Shrewsbury, headed by Henry Hotspur, the Earl of Worcester, and the Scotch Earl of Douglas ; and the king marched directly thither with 44,000 choice troops, headed by himself, the Prince of Wales, and the Earl of Dunbar ; and on the 22nd of July, 1403, at a place afterwards called Battlefield, he obtained so complete a victory, that about 10,000 of the rebels were killed, among whom was the brave Hotspur, who fell by the hands of the Prince of Wales. In 1405 another conspiracy was raised, headed by the Archbishop of York, the Earl of Northumberland, Thomas Mowbray, Earl Marshal, and other noblemen, who assembled a large body of troops at York, and published a manifesto, declaring the king a traitor, and that they were resolved to place Mortimer, the lawful heir, on the throne. But this rebellion was soon suppressed by the policy of Ralph Nevil, Earl of Westmorland.

Henry died in the Jerusalem Chamber at Westminster on the 20th of March, 1413, in the 46th year of his age and the 14th of his reign, and was interred in the cathedral at Canterbury.

He was of a middle stature, well proportioned, and perfect in all the exercises of arms and chivalry. His countenance was severe rather than serene ; and his disposition sour, sullen, and reserved. He possessed a great share of courage, fortitude and penetration : was naturally imperious, though he bridled his temper with caution ; superstitious, though without the least tincture of virtue and true religion ; and meanly parsimonious, though justly censured for want of economy, and for his ill judged profusion. He rose to the throne by perfidy and treason ; established his authority in the blood of his subjects ; and died a penitent for his sins, because he could no longer enjoy the fruits of them.

His actions had very little worth or eminence in them ; one thing, at least, has fixed an indelible stain on his memory ; and that is, his being the first burner of heretics.

HENRY V.

Henry V. the eldest son of King Henry IV. was born in 1388, and succeeded his father in 1413. Though wild and unruly in his youth, he no sooner obtained the crown than he proved himself a wise and a warlike prince. He chose a council of state composed of men of distinguished wisdom, and commanded those who had been the companions of his irregularities, either to change their manners or never to approach his person. He revived the English title to the crown of France, and in 1415 embarked his army, amounting to 15,000 men, and having landed at Havre de Grace, laid siege to Harfleur, which surrendered in five weeks. Soon after the French king, having assembled an army six times as numerous as that of Henry, challenged him to fight, and Henry consented, though the French army consisted of 150,000 men, and the English were reduced by sickness to 9000. The French, therefore, made rejoicings in their camp, as if the English were already defeated, and even sent to Henry to know what he would give for his ransom; to which he replied, "A few hours would shew whose care it would be to make that provision." The English, though fatigued with their march, sick of a flux, and almost starved for want of food, were inspired by the example of their brave king, and resolved to conquer or die. On the 25th of October, 1415, the king, being encamped near Agincourt, drew up his small army into two lines, the first commanded by the Duke of York, and the second by himself; he disposed his few men to such advantage, and behaved with such extraordinary conduct and courage, that he gained a complete victory, after having been several times knocked down, and in the most imminent danger of losing his life. The English killed upwards of 10,000 men, and took more prisoners than they had men in their army. The English lost only the Duke of York, the Earl of Suffolk, a few knights, and 400 private men. In 1417 the king, to enable himself to carry on the war, pledged his crown for 100,000 marks, and part of his jewels for 10,000 pounds; then landing at Be-ville in Normandy, he reduced Caen, and the next year subdued all Normandy. On May 21, 1420, a treaty was concluded at Troyes, which was ratified by the states of France. By this treaty the Dauphin was disinherited, and Henry V. married Catharine of France, and was declared regent of that kingdom till the death of Charles VI. when he was to take possession of that crown. But notwithstand

ing this treaty the war was continued by the Dauphin, and the next year Henry advanced into France with 30,000 men ; but while he was marching towards the river Loire he was seized with a pleuretic fever, and was carried to Vincennes, where he expired on the 31st of August, 1422, in the 34th year of his age, after a glorious reign of nine years, four months, and eleven days. His body was conveyed to England, and interred in Westminster Abbey.

The Queen Dowager, some time after, married Owen Tudor, a Welsh gentleman, by whom she had Edmund, the father of Henry, Earl of Richmond, who became King of England under the name of Henry VII

King Henry V. was tall and slender, with a long neck, engaging aspect, and limbs of the most elegant turn. He excelled all the youth of that age in agility and the exercise of arms ; was hardy, patient and laborious. His valour was such as no danger could startle, and no difficulty oppose ; nor was his policy inferior to his courage. He managed the dissensions among his enemies with such address, as proved him consummate in the arts of the cabinet. He was chaste, temperate, modest and devout ; scrupulously just in his administration, and severely exact in the discipline of his army, upon which he knew his glory and success in a great measure depended. In a word, it must be owned he was without an equal in the arts of war, policy, and government. His great qualities, however, were somewhat obscured by his ambition, and his natural propensity to cruelty.

HENRY VI.

Henry VI. was born at Windsor, December 6, 1421, and succeeded his father Henry V. 1422, when but nine months old, and reigned in England under the tutelage of his uncle Humphry, Duke of Gloucester, and in France under that of his uncle the Duke of Bedford. This unhappy prince was unsuccessful both at home and abroad. His misfortunes began in France, by the death of his grandfather, Charles VI. not quite two months after the death of his father, King Henry, which gave great advantage to the Dauphin, who was called Charles VII. and being crowned at Poitiers, disputed with Henry the crown of France : yet for some time the English continued to have great success in that kingdom, and gained the famous battles of Crevant, Verneville, and Rouvroi ; and every thing seemed to promise the entire possession of France, when it was prevented by an unforeseen blow, and well known by the name of Joan of Arc, or

the Maid of Orleans, suddenly appeared at the head of the French army, and in 1429 made the English raise the siege of Orleans. From that moment Henry's interest in France declined. However, he was carried to Paris, and crowned there with a double crown, in the cathedral church, on the 17th of December, 1444 : a truce of eighteen months was concluded between the two crowns, after which King Henry married Margaret of Anjou, daughter of Renatus, King of Naples. This was the source of many of his misfortunes ; for the king being of a mild and easy temper, and the queen a high-spirited woman, she undertook, with her favourites, to govern the kingdom. The English were now every where defeated, and soon after we had no places left in France but Calais, and the earldom of Guines. These losses were principally occasioned by the civil wars which broke out in England. Richard, Duke of York, who descended on the mother's side from Lionel, the second son of Edward III. claimed a better right to the crown than Henry, who was descended from John of Gaunt, Duke of Lancaster, the third son of the same Edward. Henry was defeated, and made prisoner, at St. Alban's, by Richard Plantagenet, Duke of York, on the 31st of May, 1455 ; and a second time at the battle of Northampton, on the 19th of July, 1460. The parliament then determined that Henry should keep the crown, and be succeeded by the Duke of York ; but Queen Margaret afterwards raised an army in the north, and gained the battle of Wakefield, December 30, 1460, in which the Duke of York was killed, and her husband delivered. This turned the scale, and sunk the interest of the house of York. However, Edward, Earl of March, the son of Richard, Duke of York, revived the quarrel, and gained a bloody battle at Mortimer's Cross, near Ludlow. In short, the Earl of March, after several engagements, was proclaimed king, by the name of Edward IV. by means of the Earl of Warwick, called the setter-up and puller-down of kings.

Henry VI. was of a hale constitution, naturally insensible of affliction, and hackneyed in the vicissitudes of fortune. He was totally free from cruelty and revenge ; on the contrary, he frequently sustained personal indignities of the grossest nature, without discovering the least mark of resentment. He was chaste, pious, compassionate, and charitable ; and so inoffensive, that the bishop, who was his confessor for ten years, declared that in all that time he had never committed any sin that required penance or rebuke.

In a word, he would have adorned a cloister, though he disgraced a crown; and was rather respectable for those vices he wanted than for the virtues he possessed. He *founded the College of Eton, near Windsor; and King's College, in Cambridge, for the reception of those scholars who had begun their studies at Eton.*

EDWARD IV.

Edward IV. Earl of March, was the son of Richard, Duke of York, and disputed the crown with Henry VI. who was of the house of Lancaster. Between these two families a great number of battles were fought, with different success; but at length Edward obtained the crown, March 5, 1461, by gaining a signal victory over Henry VI. whom he forced to flee into Scotland, with Margaret of Anjou, his consort. He afterwards gained another victory over the same unhappy prince; who after his defeat came into England in disguise, hoping to conceal himself there till he should have an opportunity of escaping by sea. But unfortunately being discovered, and seized at Waddington Hall, in Lancashire, whilst he was at dinner, he was conducted to London, with his legs tied under a horse's belly, and then confined in the Tower. The Earl of Warwick, who had chiefly contributed to raise Edward to the throne, was employed by that prince to negotiate a marriage for him in France. In the mean time Edward marrying Elizabeth, the widow of Sir John Grey, with whom the earl was in love, that nobleman was so exasperated, that he raised a rebellion, in which he twice defeated the king's forces, and afterwards took his majesty prisoner, whom he confined in Middleham Castle; from whence he escaped, and joining Lord Hastings, in Lancashire, returned to London, when another battle ensued, and Warwick being defeated, was obliged to flee into France: but shortly after landing at Dartmouth with a few troops, he soon increased them to 60,000 men; upon which Edward also raised a numerous army at Nottingham; but as his enemies were advancing, the cry of King Henry being raised in his camp, Edward fled, and escaped into Flanders. Warwick then took Henry out of the Tower, and caused him to be acknowledged King of England. But Edward afterwards returning with a small force, was received at London with acclamations of joy; and Henry, after seven months' phantom of sovereignty, was again confined in the Tower. Edward then marched against the Earl of Warwick, and routed his army in a great battle near Barnet, where the

earl himself was slain, with his brother the Marquis of Montacute, and 17,000 of his men.

Some time after, Queen Margaret having assembled an army, King Edward defeated her, and took her prisoner, with her son Prince Edward, who was soon after massacred, in the 18th year of his age. His father, King Henry, was also murdered in the Tower, or as others say, died with grief, in the 50th year of his age. Queen Margaret, after being four years confined, was ransomed by her father for 50,000 crowns. Edward caused his brother, the Duke of Clarence, to be drowned in a butt of sack. Edward being now at peace, spent his time in indolence and debauchery. His favourite mistress was Jane Shore, wife to a citizen of London. He died at Westminster, on April 9. 1483, in the 42nd year of his age, and the 23rd of his reign.

Edward IV. was a prince of the most elegant person and insinuating address; endowed with the utmost fortitude and intrepidity; possessed of uncommon sagacity and penetration: but like all his ancestors, he was brutally cruel and vindictive, perfidious, lewd, perjured, and rapacious, without one liberal thought, and without one sentiment of humanity.

He was interred at Windsor, in the new chapel, the foundation of which he himself had laid.

EDWARD V.

Edward V. eldest son of Edward IV. was born in 1470, and succeeded his father in 1483, at twelve years of age. He was at Ludlow when his father died, but being sent for to London, he, on the 4th of May, received the oaths of the principal nobility; and his uncle Richard, Duke of Gloucester, was made protector of the king and kingdom. He obliged the queen to deliver up to him the Duke of York, the king's brother, and sent them both to the Tower, under pretence of their waiting there till every thing was prepared for the coronation. Meanwhile the Duke of Gloucester, by the assistance of the Duke of Buckingham, Sir John Shaw, Lord Mayor of London, and Dr. Shaw, his brother, had the two young princes declared illegitimate, and then caused himself to be acknowledged King of England, pretending to accept of the crown with reluctance, though he had put to death Lord Hastings for no other crime than his being warmly attached to the young king; for as that nobleman was greatly beloved by the people, Gloucester pretended that his ambition and sorceries endangered the kingdom.

The queen and Jane Shore were accused as his colleagues, and the latter was taken into custody, but soon after released, on doing penance. Sir Roger Brackenbury, lieutenant of the Tower, refusing to comply with Richard's cruel designs, he for one night only gave the command of that fortress to Sir James Tyrrell; and he procured two villains, who in the dead of the night entered the chamber where the princes lay, and smothered them in bed. Thus died Edward V. having reigned only two months and twelve days.

RICHARD III.

Richard III. King of England, surnamed *Crook-back*, was the brother of Edward IV. and raised himself to the throne by a series of the most inhuman murders. Henry VI. and the young prince his son, with several noblemen of the first rank, died while he was Duke of Gloucester, to prepare the way for his usurping the throne from Edward V. He was proclaimed king on the 20th of June, 1483, in the 32nd year of his age, but delayed the ceremony of his coronation till the 6th of July; and soon after he caused Edward V. and his brother, whom he had before declared to be bastards, to be smothered in the Tower. The same year, having broken his promise to the Duke of Buckingham, who had been greatly instrumental in placing him on the throne, that nobleman took up arms against him, in order to assist Henry, Earl of Richmond, the last branch of the house of Lancaster, to obtain the crown; but the duke being betrayed by a fellow who had been his servant, for the sake of a very great reward offered for apprehending him, he was beheaded at Salisbury, without any legal process. However, the Earl of Richmond, obtaining assistance from the Duke of Brittany, sailed from St. Maloes on the 12th of October, with 5000 men and 40 ships; but his fleet being dispersed, he returned to Brittany, and afterwards to France. Richard, in the mean time, sacrificed many persons to his revenge, and sent Sir Ralph Ashton into the western counties, with power to execute upon the spot all such persons whom he even suspected to be guilty of high treason; and finding that the Earl of Richmond founded his projects on the hopes of marrying Elizabeth, daughter of Edward IV. he resolved to marry that princess himself, though he was already married to the widow of Edward, the Duke of Wales, the son of Henry VI. whom he himself had killed: and therefore now, in order to obtain Elizabeth, he is said to have poisoned his queen. The

Earl of Richmond, however, landed in Wales, with 2000 men, which increased to 5000; and with this small army engaged the king's forces, which consisted of 13,000 men, at Bosworth, in Leicestershire. But the Earl being joined by Lord Stanley and his brother with fresh troops, he gained a complete victory: when Richard seeing the day was lost, rushed into the midst of his enemies, and died with his sword in his hand. The crown being found after the battle, was placed on the head of the Earl of Richmond; and Richard's body was taken up entirely naked, and covered with blood and dirt, in which condition it was thrown across a horse, carried to Leicester, and interred without the least ceremony. Thus fell Richard, on the 22nd of August, 1485, in the 34th year of his age, after an infamous reign of two years. He was buried in the Grey-friars church at Leicester.

Richard III. was, through the whole course of his life, restrained by no principle of justice or humanity; and it appears that he endeavoured to maintain the crown by the same fraud and violence by which he obtained it. He certainly possessed an uncommon solidity of judgment, a natural fund of eloquence, the most acute penetration, and such courage as no danger could dismay. He was dark, silent, and reserved; and so much master of dissimulation, that it was almost impossible to dive into his real sentiments when he wanted to conceal his designs. His stature was small, his aspect cloudy, severe, and forbidding; one of his arms was withered, and one shoulder higher than the other, from which circumstance of deformity he acquired the epithet of Crook-back. He was the last King of the Plantagenet race, who had swayed the sceptre ever since Henry II.

HENRY VII.

Henry VII. King of England, was the son of Edmund Tudor, Earl of Richmond, and of Margaret of the house of Lancaster. He was crowned on the 30th of October, 1485. He married Elizabeth, daughter of Edward IV. by which the claims of the houses of York and Lancaster were united. However, fresh troubles broke out, and the enemies to Henry attempted twice to dethrone him, by setting up two pretenders. The first was one Lambert Simnel, a baker's son, who assumed the title of Earl of Warwick, and pretended to be the son of the Duke of Clarence, brother to Edward IV.; but being defeated and taken prisoner, was made King Henry's turnspit. The other was an adventurer, named Perkin Warbeck, who personated Richard, Duke of York,

Edward the Fifth's brother, who was murdered in the Tower ; and being at length taken prisoner, was hanged at Tyburn. Henry assisted the Emperor Maximilian against Charles VIII. of France ; he made war on the Scots ; instituted the band of gentlemen pensioners ; built the chapel adjoining to Westminster Abbey, which still bears his name ; and founded several colleges ; by which he obtained the character of a pious prince, and a friend to learning, though he was remarkable for his avarice, and grievously oppressing the people by numberless exactions. He died at Richmond Palace, which he had caused to be erected, the 22nd of April, 1509, aged 52, in the 24th year of his reign, and was succeeded by his second son, Henry VIII. He also left two daughters ; Margaret, who was married to James IV. King of Scotland ; and Mary, who married the French king Louis XII.

Henry VII. was tall, straight, and well shaped, though slender ; of a grave aspect, and saturnine complexion. He inherited a natural fund of sagacity, which was improved by study and experience ; nor was he deficient in personal bravery, or political courage. He was cool, close, cunning, dark, distrustful, and designing ; and of all the princes who had sat upon the English throne, the most sordid, selfish, and ignoble. At the same time, it must be owned he was a wise legislator, chaste, temperate, assiduous in the exercise of religious duties ; decent in his deportment, and exact in the administration of justice, when his own private interest was not concerned ; though he frequently used religion and justice as cloaks of perfidy and oppression. His soul was continually actuated by two ruling passions, equally base and unkingly, namely, the fear of losing his crown, and the desire of amassing riches ; and these motives influenced his whole conduct.

He left behind him, 1,800,000 pounds, which he had extorted from his subjects ; but to make some amends, he converted the palace of the Savoy into an hospital, and built some religious houses.

HENRY VIII.

Henry VIII. King of England, was born June 28, 1491, and succeeded his father, Henry VII. on April 23, 1509. His marriage with Catharine of Arragon, relict of his brother Arthur, was solemnized the beginning of June, as was the coronation of both king and queen, on the 24th of the same month. He joined the Emperor Maximilian against

Louis XII. King of France, defeated the French at the battle of the Spurs, in 1513, and took Terouenne and Tournay. On his return to England he marched against the Scots, and defeated them at Flodden, September 9, after an obstinate and bloody battle, in which James IV. of Scotland was slain. In 1514 Henry VIII. concluded a treaty of peace with Louis XII. and gave his sister Mary in marriage. He wrote a book against Luther, *Of the Seven Sacraments, &c.* It was presented to Pope Leo X. in full consistory, who, for his service done the church, bestowed on Henry and his successors the title of *Defender of the Faith*. This title being afterwards confirmed by parliament, the kings of England have borne it ever since.

A war breaking out between the Emperor Charles V. and the French king Francis I. Henry at first took the part of the emperor, but afterwards, at the solicitation of Cardinal Wolsey, contracted a strict friendship with Francis, and in 1528 laboured to procure the deliverance of Pope Clement VII. By the assistance of Wolsey, he, in 1533, divorced Catharine of Arragon, and married Anne Boleyn, on which he was excommunicated by the pope. Henry, enraged at this excommunication, abolished the papal authority in England, refused to pay the see of Rome his annual tribute, ordered the dissolution of monasteries, obliged the clergy to acknowledge him head of the church, and those who refused were either banished or put to death. Among the latter were the learned Sir Thomas More, Lord Chancellor of England, and Fisher, Bishop of Rochester. The reformation thus begun in this kingdom was completed in the reign of Elizabeth. Some time after, being charmed with the beauty of Jane Seymour, he caused Anne Boleyn to be beheaded; but Jane dying in childbed of Prince Edward, he married Anne of Cleves, whom he afterwards divorced. He then married Catharine Howard, the Duke of Norfolk's daughter, whom he caused to be beheaded, under pretence that he had not found her a virgin; but his real motive was that of having conceived a violent passion for Catharine Parr, a young widow of great beauty. A war breaking out between him and the Scots, who were assisted by the French, Henry, in 1545, took Bologne from the latter, and burnt Leith and Edinburgh. He founded six new bishoprics, namely, Westminster, Oxford, Peterborough, Bristol, Chester, and Gloucester; all of which, except Westminster, are still episcopal sees. He united Wales to England, and died January 22. 1547, aged 56, after a reign of

35 years, and was interred at Windsor with idle processions and childish pageantry, which in those days passed for real state and magnificence.

Henry VIII. before he became corpulent, was a prince of goodly personage and commanding aspect, rather imperious than dignified. He excelled in all the exercises of youth, and possessed a good understanding, which was not much improved by the nature of his education. In the first year of his reign his pride and vanity seemed to domineer over all his other passions; though from the beginning he was impetuous, headstrong, impatient of contradiction and advice. He was rash, arrogant, prodigal, vain-glorious, pedantic, and superstitious. He delighted in pomp and pageantry, the baubles of a weak mind. His passions, soothed by adulation, rejected all restraint; and as he was an utter stranger to the finer feelings of the soul, he gratified them at the expense of justice and humanity, without remorse or compunction. From the abject compliance of his subjects he acquired the most despotic authority over them, and became rapacious, arbitrary, froward, fretful, and so cruel, that he seemed to delight in their blood.

EDWARD VI.

Edward VI. King of England, and the only son of Henry VIII. by Jane Seymour, was born October 12, 1537, and ascended the throne at nine years of age; at which time he was well skilled in the Latin and French tongues, and had obtained some knowledge of the Greek, Italian, and Spanish. His person was very beautiful; he had great sweetness of temper, and was remarkable for his piety and humanity. He was proclaimed January 31. 1547, and crowned February 20. He was committed to the care of sixteen persons, whom Henry had nominated regents of the kingdom; the principal of whom was the Earl of Hertford, the king's uncle by the mother's side, who was soon after created Duke of Somerset. The young Queen of Scotland was demanded in marriage for King Edward, but the same proposal being made by France, in behalf of the Dauphin, she was sent into that kingdom; on which the Duke of Somerset invaded Scotland, and routed the Scots' army at Musselburg. The great power of the Duke of Somerset raised him many enemies, the chief of whom was his brother Thomas, Lord Seymour; and articles of accusation being exhibited against him, he was attainted in parliament, condemned, and beheaded, without being brought to

an open trial. However, the Duke of Somerset himself was, some time after, impeached, and charged with a design to seize the king and to imprison the Earl of Warwick: for this he was condemned, and the young king being in a manner forced to sign the sentence, he was executed on the 22nd of January, 1551. The Earl of Warwick, now Duke of Northumberland, succeeded to the Duke of Somerset's power; and at length, on the king's being taken ill of the measles, married Lord Guildford Dudley, his fourth son, to the Lady Jane Grey, eldest daughter of the Duke of Suffolk, and persuaded Edward to settle the crown on her, his sisters Mary and Elizabeth having been both declared illegitimate during the life of their father; and the prince, hoping to forward the reformation, appointed her as his successor, and soon after died of a consumption, July 6, 1553, in the 16th year of his age, having reigned six years, five months, and nine days. He continued firmly attached to those principles of the reformation which he had imbibed while young, and which made great progress in his reign. He confirmed his father's grant of Christ's and St. Bartholomew's hospitals, and founded Bridewell and St. Thomas's hospitals. He also founded several schools, which were mostly endowed out of the church lands.

MARY.

Mary, Queen of England, daughter of Henry VIII. and Catharine of Arragon, was born the 18th of February, 1515. On her father's marrying Anne Boleyn she was declared illegitimate. After the death of Edward VI. in 1553, Lady Jane Grey was proclaimed Queen of England; but Mary, promising that no change should be made in religion, obtained the crown, and some time after Lady Jane, with the Lord Dudley, and other persons of quality, were beheaded. Soon after Mary's accession to the throne, she married Philip II. afterwards King of Spain, son of the Emperor Charles V. who was then living; and in violation of the most sacred promises, began a dreadful persecution of the protestants, which was carried on by Bonner, Bishop of London, and Gardiner, Bishop of Winchester. Great numbers of persons suffered martyrdom at the stake; among whom were Cranmer, Ridley, Latimer, Hooper, and Ferrar; and all the prisons in the kingdom were crowded with pious sufferers, who chose to submit to persecution rather than violate their consciences. Even the Princess Elizabeth wa

closely watched, and was obliged to conceal her religious sentiments.

Amidst these dreadful proceedings, Mary was far from being happy; a continual disagreement with her husband, who was younger than she, and of whom she was passionately fond, with the loss of Calais, which was taken by the French, threw her into a complication of disorders, of which she died without issue, the 17th of November, 1558, in the 43rd year of her age, after a bloody reign of five years, four months, and eleven days.

In the four years which the persecution lasted, nearly 300 persons were put to death; namely, one archbishop, four bishops, twenty-one divines, eight gentlemen, eighty-four artificers, one hundred husbandmen, servants, and labourers; twenty-six wives, twenty widows, nine virgins, two boys, and two infants; besides which, several died in prison, and many were whipped or otherwise cruelly treated.

The characteristics of Mary were bigotry and revenge: added to this, she was proud, imperious, froward, avaricious: and wholly destitute of every agreeable qualification. She was buried at Westminster, in the chapel of her grandfather Henry VII.

ELIZABETH.

Elizabeth, daughter of Henry VIII. and Anne Boleyn, was born September 8, 1533, and ascended the throne November 17, 1558. This princess was crowned with great solemnity on the 15th of January, 1559.

As there were many troubles then in foreign states, chiefly on account of religion, she assisted the protestants in Scotland, France, and the Low Countries, against their respective sovereigns, or the governing parties, by whom they were cruelly oppressed and persecuted. The Queen of Scots, and the Dauphin, her husband, had, by order of Henry II. of France, taken the arms of England, with the titles of sovereigns of that kingdom. This made Elizabeth consider Mary as a dangerous rival, whereupon, in 1560, she entered into a treaty with the Scotch malecontents, and sent an army into Scotland, to break the measures of her enemies, which had the desired success. Some time after, she assisted the Huguenots in France. By these means Elizabeth kept both France and Scotland so employed, that they could find no opportunity to put their schemes in execution of de-throning her. She always kept a good fleet in readiness against any invasion; and effectually secured the love of her

subjects, whom she looked upon as her only support. The Queen of Scots being defeated in 1568, by the forces raised by the malecontents in that kingdom, was obliged to flee into England, where the queen kept her prisoner many years.

In 1569 a rebellion broke out in the north, under the earls of Westmorland and Northumberland, and Dacre, a northern gentleman, who intended to have set Mary Queen of Scots on the throne, and to have restored the popish religion. This rebellion however was suppressed, and the Earl of Northumberland was beheaded; as was also the Duke of Norfolk, in 1572, who had been released out of the Tower, and engaged again in a conspiracy against the queen.

The year 1571 passed chiefly in a negotiation for a marriage between Elizabeth and the Duke of Anjou, second son to Catharine de Medicis, and brother to Charles IX. of France. Both Charles and Elizabeth found their account in this negotiation, though neither of them intended it should take effect. Charles's design was to amuse the protestants, particularly the Huguenots, with whom he had made a perfidious peace, till he had drawn them into the snare, in order to destroy them by treachery, when he found it difficult to do it by open force. Queen Elizabeth entered into the negotiation of the match to please her ministers, who were continually pressing her to marry, in order to cut off all hopes from the queen of Scots, and to dishearten her enemies. However, a defensive alliance was concluded between the two crowns. Charles died, and was succeeded by the Duke of Anjou, by the name of Henry III. with whom Queen Elizabeth renewed the league between the two crowns, but secretly supplied the Prince of Conde with money for the Huguenots.

Some time after another negotiation was carried on for a marriage between her and the Duke of Alencon, now Duke of Anjou, Henry's brother, even to the signing of the marriage articles, and the duke came over in person; but it was all broken off on a sudden.

In 1577 she assisted the people of the Low Countries, who were grievously oppressed by the Duke of Alva, the King of Spain's general, and who was endeavouring to extirpate the protestants; she lent them £100,000 sterling, to enable them to carry on the war. The next year several companies of volunteers were formed in England, who went over to serve the States, with the queen's approbation. Some years after she sent a considerable body of forces,

under the Earl of Leicester ; but he not being agreeable to the States, was recalled, and Lord Willoughby was appointed general of the English forces in his room. This war terminated in the total revolt of seven of those provinces from the dominion of Spain, which afterwards made the most considerable republic in the world. The pope excommunicated the queen ; and the King of Spain and the Duke of Guise formed a league with the Roman pontiff to invade England, dethrone Elizabeth, and set up the Queen of Scots in her room. In the mean time several plots were set on foot by the popish emissaries to take away her life, for which several priests, jesuits, and others, were executed. In 1585 the queen sent Sir Francis Drake to America, who took several places in the Spanish West Indies. In 1586 she made an alliance with the King of Scotland, for their mutual defence, and the security of the protestant religion. This year died the learned and ingenious Sir Philip Sidney, of a wound he received in a battle in the Low Countries.

Bubington's conspiracy, in which were engaged several popish priests from the seminaries abroad, was discovered ; and they were to the number of fourteen arraigned, condemned, and executed. It was laid for an invasion, to kill Elizabeth, free the Queen of Scotland, and set her on the throne. As the Queen of Scots appeared, by letters and otherwise, to have been concerned in this conspiracy, it was resolved now to prosecute her on an act of parliament made the preceding year, whereby the person for whom, or by whom, any thing should be attempted against the queen, was liable to death. Commissioners were accordingly sent to try her at Fotheringay Castle in Northamptonshire (where she was then in custody) who passed sentence upon her on October 25. Four days after it was approved and confirmed by parliament ; on December 6 it was proclaimed through the whole kingdom ; and on February 8 following the sentence was executed upon her in the hall of the castle, by severing her head from her body, which she suffered with equal calmness and resolution.

In 1588 the King of Spain, encouraged by Pope Sixtus V. sent a great fleet, to which they had given the title of the invincible armada, to invade England. It consisted of 130 great ships, 20 caravels, and 10 salves, having above 20,000 soldiers on board, with seamen, ammunition, and provision in proportion. To oppose this armament 20,000 men were dispersed along the southern coasts, and an army of 22,000 foot, and 2,000 horse were encamped at Tilbury,

where the queen reviewed them, and made a very engaging speech to them. Another army, of 34,000 foot and 2000 horse, was appointed to guard the queen's person; and a considerable fleet was fitted out under the command of Lord Howard, as admiral, and Drake, Hawkins, and Forbisher, vice-admirals; while Seymour was sent with forty English and Dutch ships to the coast of Flanders, to hinder the Prince of Parma from joining the Spanish fleet.

On the 19th of July the Spanish fleet, commanded by the Duke of Medina Sidonia, entered the Channel, when the English fleet kept close to them, and soon took some of their ships. On July 24 there was a brisk engagement. On the 27th the Spanish fleet came to an anchor off Calais, expecting in vain the Prince of Parma to put to sea with his army, and make a descent on England, as it had been agreed. The English fleet, now consisting of 140 ships, followed them; and the English admiral, in the night, sent eight fire-ships among them, which so terrified them, that they cut their cables, and put to sea in the utmost confusion; the English admiral took the Galeass, and the commander of it was slain. In short the whole fleet was dispersed, and the Spaniards resolved to make the best of their way home. Of this prodigious armament only fifty-three ships returned to Spain, and those in a shattered condition. Queen Elizabeth went in state to St. Paul's, to return thanks to God for this decisive victory.

In 1594 Roderic Lopez, a Jew, who was the queen's physician, two Portuguese, and Patrick Cullen, an Irishman, were bribed by the Spanish governors of the Netherlands to take her off by poison; but the plot being discovered, the conspirators were seized and executed; as were Edmund York and Richard Williams, the next year, for undertaking to commit a similar crime on the promise of 40,000 crowns from the Spanish governors.

In 1596 the queen sent a fleet and army under Howard, the Earl of Essex, and Sir Walter Raleigh, to the coasts of Spain, which plundered Cadiz, burnt the merchant ships at Port Real, took and destroyed thirteen Spanish men of war, and did other considerable damage. In 1598 Henry IV. of France, having made a separate peace with the King of Spain, Queen Elizabeth and the States entered into a new treaty to carry on the war against that monarch by themselves. On the 25th of February, 1601, Robert Devereux, Earl of Essex, was beheaded.

Queen Elizabeth died on March 24, 1603, in the 70th year of her age, and the 45th of her reign, after having named the Scottish monarch for her successor. She was interred with great magnificence in the chapel of Henry VII. at Westminster.

The papists represent Elizabeth as a monster of cruelty, avarice, and lasciviousness; which is not to be wondered at, considering her severity to them. It is indeed difficult to excuse her beheading Mary Queen of Scots, and the severity she sometimes made use of both against the papists and the protestant dissenters: but she certainly understood the art of governing in an eminent degree; and her reign was the school of able ministers, great statesmen, and distinguished warriors. She understood the Greek, Latin, French, Spanish; and Dutch languages, and possessed a deep, penetrating, and elevated mind. Her conversation was sprightly and agreeable, her judgment solid, her apprehension acute, her application indefatigable, and her courage invincible. Yet her glorious reign, on which Providence for a long time poured innumerable blessings, ended in a most dismal melancholy, which some are of opinion was occasioned by the death of the Earl of Essex. This queen makes a considerable figure among the learned ladies. Besides a variety of other things, she wrote a Comment on Plato, and translated into Latin two of the Orations of Isocrates, and a play of Euripides.

JAMES I.

James the Sixth of Scotland and First of England, son of Henry Stuart and Mary Queen of Scots, was born June 19. 1566, and ascended the English throne in 1603, after the death of Queen Elizabeth, who had nominated him for her successor, as being her nearest relation; for he was descended from the eldest son of King Henry VII. He united Scotland to England, and took the title of King of Great Britain. In 1604 he ordered all popish priests to leave England on pain of death.

In 1605 a plot was discovered of a design to blow up the parliament house, thirty-six barrels of gunpowder being put in a cellar under the lords' house, which had been hired for that purpose, and covered over with coals, billets, and fagots. Guy Faux, who was to have set fire to the train, was discovered in a cloak and boots, with a dark lantern, tinderbox, and matches in his pocket. Himself and his

accomplices were executed in January following; as were also Oldcorn and Garnet, two Jesuits, for counselling and abetting the plot.

In 1606 King James caused the oath of allegiance to be drawn up; and in 1621 summoned a parliament, in which were formed the two parties called Whigs and Tories. He suffered the Dutch to take Amboyna, and to massacre the English inhabitants, without showing any resentment; and caused the brave Sir Walter Raleigh to be put to death for his successful expeditions against the Spaniards. He was educated by the famous Buchanan, and prided himself on his skill in Latin and school divinity; though the works he published prove that he was but an indifferent writer. These works principally consist of several tracts, which are printed in one volume folio, and contain an attempt to prove that monarchs have a right to be absolute, and independent of their subjects; also treatises on the heinous sin of taking tobacco; on witchcraft, &c. Mr. Walpole observes, "There is not the least suspicion that the folio under the name of James I. is not of his own composition; for though Roger Ascham," says he, "may have corrected or assisted portions of his illustrious pupil, nobody can imagine that Buchanan dictated a word of the *Demonologia*, or of the polite treatise entitled '*A Counterblast to Tobacco*.' Quotations, puns, witticisms, superstition, oaths, vanity, prerogative, and pedantry, the ingredients of all his sacred majesty's performances, were the pure produce of his own capacity, and deserving all the incense offered to such immense erudition by the divines of his age, and the flatterers of his court." He died at Theobald's, March 27. 1625, aged 55, after having reigned 22 years in England, and was succeeded by his son Charles I.

James I. was of a middle stature, inclining to corpulency; his forehead was high, his beard scanty, his aspect meagre, his address awkward, and his appearance slovenly. There was nothing dignified either in the composition of his mind or person. In the course of his reign he exhibited repeated instances of his ridiculous vanity, prejudices, profusion, folly, and littleness of soul. All that we can add in his favour is, that he was averse to cruelty and injustice; very little addicted to excess, temperate in his meals, kind to his servants, and even desirous of acquiring the love of his subjects, by granting that as a favour which they claimed as a privilege. His reign, though ignoble to himself, was happy

to his people, who were enriched by commerce, which no war interrupted.

CHARLES I.

Charles I. King of Great Britain, was born at Dumferling in Scotland, November 19, 1600. He succeeded his father, James I. in 1625, and the same year married Henrietta, of France, the daughter of Henry V. Two years after he sent assistance to the French Calvinists, to prevent the taking of Rochelle; but on the reduction of that place a treaty of peace was concluded between the two crowns. In this reign there were continual struggles between the king, who wanted to assume to himself the absolute power of disposing of his subjects' property, leaving their grievances undressed, and the parliament, who were willing to grant the necessary supplies, provided their grievances were redressed, and the rights and privileges of the subjects secured, which at last produced a civil war. August 22, 1642, the king in a solemn manner set up his standard at Nottingham. On June 1. 1645, was fought the famous battle of Naseby, which decided the quarrel between the king and the parliament, wherein the forces of the latter gained a complete victory. Upon the approach of Lord Fairfax to lay siege to Oxford, his majesty threw himself into the hands of the Scots' army. Oxford surrendered June 22, 1646, and the few remaining garrisons soon after. The parliament then consulted how to get the king out of the hand of the Scots, and to send them back into their own country. After several debates about the disposal of his person, the Scots, having received £200,000, August 8. 1646, delivered him up to the commissioners of the parliament of England, who were sent down to Newcastle to receive him. The same day their army began to march for Scotland, and the king was conveyed to Holmby House in Northamptonshire. He was afterwards removed to Hampton Court, whence he made his escape, and fled to the Isle of Wight. He had not been there long when a party of Cromwell's soldiers seized him, and conveyed him first to Hurst Castle, then to Windsor, and at last to St. James's Palace. The next day he was brought to his trial, and sentence of death was passed upon him; pursuant to which he was beheaded before the Banqueting House at Whitehall, on the 30th of January, 1648, in the 49th year of his age, and the 24th of his reign. His body was carried to Windsor, and privately interred in St. George's Chapel.

Such was the unfortunate end of Charles I. King of England. He was a prince of a middle stature, robust, and well proportioned. His hair was of a dark colour, his forehead high, his complexion pale, his visage long, and his aspect melancholy. His perception was clear and acute, his judgment solid and decisive. In his private morals he was unblemished and exemplary. He was merciful, modest, chaste, temperate, religious, and personally brave; but he suffered himself to be guided by counsellors, who were not only defective in knowledge and judgment, but generally proud, partial, and inflexible; and he paid too much deference to the advice and the desires of his consort, who was superstitiously attached to the errors of popery.

THE COMMONWEALTH.

Oliver Cromwell was the son of a private gentleman, of Huntingdon, and was born the 24th of April, 1599. Being the son of a second brother, he inherited a very small paternal fortune. From accident or intrigue he was chosen member for Cambridge in the Long Parliament: but he seemed at first to possess no talents for oratory, his person being ungraceful, his dress slovenly, and his elocution homely, tedious, obscure, and embarrassed. He made up, however, by zeal and perseverance, what he wanted in natural powers; and being endowed with unshaken intrepidity and much dissimulation, he rose through the gradations of preferment to the post of lieutenant-general under Fairfax; but in reality possessing the supreme command of the whole army. After several victories, he gained the battle of Naseby; and this, with other successes, soon put an end to the war.

In 1649 Cromwell was sent as general into Ireland, and in about nine months he subdued almost the whole of that kingdom, and left his son-in-law, Ireton, to complete the conquest. On June 26, 1650, he was appointed general and commander-in-chief of all the forces of the commonwealth, and set out on his march against the Scots, who had espoused the royal cause, and placed young Charles, the son of their late monarch, on the throne. On September 3, 1651, he totally defeated the royalists at Worcester, when the king himself was obliged to fly. Charles, having undergone an amazing variety of dangers and distresses, landed safely at Fescamp in Normandy, no less than sixty persons having at different times been privy to his escape. In the mean time Cromwell, crowned with success, returned to London, where he was met by the speaker of the House

of Commons, accompanied by the mayor and magistrates of London, in their formalities. He began now to complain of the Long Parliament, which, on the 20th of April, 1653, he dissolved by force; and two days after he published a declaration of his reasons, signed by himself and his council of officers. On December 16 he was invested with the title of Lord Protector of the Commonwealth of England, Scotland, and Ireland. He now applied himself to the management of the several parties, and supplied the benches of the courts of Westminster with the ablest lawyers, but acted in the most arbitrary and oppressive manner where his own interest was concerned. He gave the command of

the forces in Scotland to General Monk, and sent his own son Henry to govern Ireland. In 1655 he sent a powerful fleet, under the command of Admiral Penn, and 5000 land forces, commanded by General Venables, to attack the island of Hispaniola. Failing, however, in this, and being driven off the place by the Spaniards, they steered to Jamaica, which was surrendered to them without a blow. In the mean time Admiral Blake performed great actions in the Mediterranean; so that the Protector's reputation was very high abroad.

In 1657 the parliament agreed to offer Cromwell the title of king; but as he found this proposition disagreeable to his best friends, he declined it, and resolved upon a new inauguration, which was accordingly performed in Westminster Hall, June 26, with all the splendour of a coronation. The next year Dunkirk surrendered to the French, and was delivered into the hands of the English.

His favourite daughter, Mrs. Claypole, died on August 6, 1658, of a languishing disorder, during which she is said to have awakened the horrors of his guilty conscience. He was from that time wholly altered, grew more reserved, and suspicious; not indeed without reason, for he found a general discontent prevail throughout the nation. He wore armour under his clothes, and always kept a pistol in his pocket. He always travelled with haste, and attended by a numerous guard. He never returned from any place by the road he went, and seldom slept above three nights together in the same chamber. A tertian ague came at last to deliver him from this life of horror and anxiety. He died on the 3rd of September, the anniversary of the victories he had obtained at Dunbar and Worcester; and his death was rendered remarkable by one of the most violent tempests which had blown in the memory of man. He was then

fifty-nine years old, and had usurped the government nine years.

Richard, his son, was the next day proclaimed Lord Protector; but as he wanted resolution to defend that title, he soon signed his abdication in form, and retired to live at first on the continent, and afterwards on his paternal fortune at Cheshunt, in Hertfordshire, where he died in the year 1712.

CHARLES II.

Charles II. was born on the 29th of May, 1630. After an exile of twelve years, in France and Holland, he was restored by General Monk, who had rendered himself absolute master of the parliament. On May 29, 1660, he made his triumphal entry into London, and was crowned the following year. In 1662 the marriage between the king and Catharina, Infanta of Portugal, was solemnized. In 1665 war was declared against the Dutch, and on the 3rd of June a great victory was obtained over them at sea. The next year the French king declared war against England. The English fleet, under the command of Prince Rupert and the Duke of Albemarle, put to sea about the middle of May; and there was soon a most bloody fight with Admiral Ruyter, in which the English were worsted. There was another furious engagement in July, when the English gained a complete victory, destroying above twenty Dutch men of war, and driving the rest into their harbours. In this action the Dutch lost four of their admirals, besides 4000 other officers and seamen; and the loss on the side of the English is said to have been inconsiderable. In August Sir Robert Holmes burnt two men of war, and 150 sail of merchant ships, belonging to the Dutch.

On September 3 a terrible fire broke out in London, which, continuing three days, destroyed 600 streets, including 89 churches, many hospitals and public edifices, and 12,202 dwelling houses. The ruins, comprehending 436 acres of ground, extended from the Tower, along the river, to the Temple Church; and north-easterly, along the city walls as far as Holborn Bridge.

On June 11, 1667, the Dutch sailed up the river Medway, as far as Chatham; made themselves masters of Sheerness, and burnt several men of war, together with a magazine full of stores. But king Charles, notwithstanding this piece of treachery, concluded a treaty at Breda, by which the colony of New York, in North America, was ceded by the

Dutch to the English. This peace was however of a short continuance; for in the year 1672 King Charles joined with the French, who attacked the Dutch by land, while the English engaged their fleets at sea; but peace was concluded after two years. The year 1684 was almost wholly taken up with prosecutions of persons for speaking ill of the king, the Duke of York, and the government; some were fined in large sums, and others pillored. In 1685 the king was seized with an apoplectic fit; and though he was recovered by bleeding, yet he languished only a few days, and expired on the 6th of February, in the 55th year of his age, after a reign of nearly 25 years. He was buried in Henry the Seventh's Chapel, in Westminster Abbey. He had no children by his queen, but several by his mistresses.

Charles II. was in his person tall and swarthy, and his countenance marked with strong harsh lineaments. His penetration was keen, his judgment clear, his understanding extensive, his conversation lively and entertaining, and he possessed the talent of wit and ridicule. He was easy of access, polite, and affable. Had he been limited to a private station he would have passed for the most agreeable and best natured man of the age in which he lived. His greatest enemies allow him to have been a civil husband, an obliging lover, an affectionate father, and an indulgent master; even as a prince, he manifested an aversion to cruelty and injustice. Yet these good qualities were more than overbalanced by his weakness and defects. He was a scoffer at religion, and a libertine in his morals; careless, indolent, profuse, abandoned to effeminate pleasure, incapable of any noble enterprize, a stranger to manly friendship and gratitude, deaf to the voice of honour, blind to the allurements of glory, and in a word, wholly destitute of every active virtue.

Trade and manufacturers flourished more in this reign than at any other era of the English monarchy. Industry was also crowned with success, and the people in general lived in ease and affluence.

JAMES II.

James II. the second son of Charles I. King of Great Britain, and Henrietta, the daughter of Henry IV. King of France, was born at London, the 14th of October, 1633, and had the title of Duke of York. After the taking of Oxford, in 1646, the parliament committed him to the care of the Earl of Northumberland; but he made his escape, dressed

like a girl; and flying into Holland, sought protection from his sister, the Princess of Orange. He afterwards went into France, served under the Viscount de Turenne, and gave proofs of a courage worthy of his birth. He also distinguished himself in the Spanish army, under Don Juan of Austria. In 1660 he returned to England with his eldest brother, King Charles II.; was made lord high admiral of the kingdom, and beat the Dutch fleets in 1665, and in 1672. However, as he openly professed his adherence to the popish religion, and prevailed upon his brother to take several arbitrary and unpopular measures, the parliament attempted to exclude him from the succession; but Charles II. dying on the 6th of February, 1685, the Duke of York was proclaimed king the same day, under the title of James II. and a short time after in Scotland, under that of James VII. On his ascension he made a speech to the privy council, promising to preserve the government both of the church and state, yet two days after he went publicly to mass.

On the 11th of June the Duke of Monmouth, natural son of King Charles II. landed at Lyme in Dorsetshire, with only eighty-three followers, and immediately published a declaration that his sole motive for taking arms, was to preserve the protestant religion, and to deliver the nation from the usurpation and tyranny of James, Duke of York; and that his mother was actually married to King Charles II. He thus raised an army in the west of England; but being defeated and taken prisoner, was beheaded on Tower Hill, July 15. 1685, aged 35 years; and those who had espoused his cause were butchered by military execution under General Kirk, or barbarously executed by form of law under Judge Jeffries, who caused about 600 persons to be hanged; and the steeples, town gates, and roads, were stuck with the heads and limbs of the sufferers.

James II. shewed great zeal for the restoration of the popish religion in England, and in 1687 published a proclamation, granting liberty of conscience, by which he gave great pleasure to the dissenters, who had been severely persecuted in the preceding reigns; but on its being discovered that this was an artifice intended to favour the popish party, who were soon put into places of honour and profit, they joined with those of the established church in opposing it. The popish priests now appearing publicly in their habits in the streets, and a nuncio arriving from Rome, the whole nation was alarmed, and applied to William Henry

of Nassau, Prince of Orange, who had married Mary, King James's eldest daughter, and was himself the son of that king's eldest sister. This prince arrived in England in 1688, when the dissatisfaction against the king was so great, that a considerable part of his army forsook him; and without venturing an engagement, King James privately retired to France; on which the Prince of Orange was crowned King of England, by the name of William III. Thus was formed the famous period in English history called the Revolution.

In 1689 James II. landed with an army in Ireland, in order to render himself master of that kingdom; but having lost the battle of the Boyne, in which King William commanded in person, he was obliged to return to St. Germain, where he died, Sept. 16. 1701, aged 68. He was buried in the church of the monastery of the Benedictines, in Paris. James II. wrote memoirs of his own life and campaigns, to the Restoration; and memoirs of the English affairs, chiefly naval, from the year 1660 to 1673.

James II. was a prince in whom some good qualities were rendered ineffectual, by mistaken notions of the prerogative, excessive bigotry to the religion of Rome, and an inflexible severity of temper. He was brave, steady, resolute, diligent, upright, and sincere, except when warped by religious considerations; yet even where religion was not concerned, he appears to have been proud, haughty, vindictive, cruel, and unrelenting; and though he approved himself an obedient and dutiful subject, he certainly became one of the most intolerable sovereigns that ever reigned over a free people.

WILLIAM III.

William III of Nassau, Prince of Orange, Stadtholder of the United Provinces, King of England, &c. was the son of William of Nassau, Prince of Orange, by Mary, the eldest daughter of Charles I. King of England, and was born at the Hague, the 14th of November, 1650. He was about 22 years of age when he was elected Stadtholder, and declared general of the Dutch troops, in order to put a stop to the rapidity of the conquests made by Louis XIV. In 1673 he took the strong town of Nareden, and obliged the French to quit Utrecht, and several considerable places where they had garrisons. He soon afterwards engaged the French at Senef, where he gained great honour by his courage and conduct, and obtained a victory, after a most obstinate engagement. On the 17th of October, 1677, he embarked for England; and on the 4th of November he was married

to the Princess Mary, eldest daughter of the Duke of York. On the 29th of the same month he departed from London with his princess, and landed at Terbeyde. In August, 1678, he attacked and defeated the Duke of Luxemburgh, in his quarters, near the Abbey of St Dennis; in the heat of the action he advanced so far, that he was in great danger of being killed. On June 29, 1684, a treaty was signed at the Hague, which put an end to the war.

James, Duke of York, having ascended the throne of England after the death of his brother Charles II. endeavouring to restore the popish religion, and also to destroy the civil and religious liberty of the people, they naturally cast their eyes on the Prince of Orange, and applied to him for deliverance; on which he landed at Torbay, November 5, 1688, and was joyfully received by almost the whole nation.

James now made his escape to France, and after his departure the lords and commons agreed, after much dispute, that he had abdicated his throne: upon which the Prince of Orange, and the Princess Mary, were proclaimed king and queen, the 13th of February, 1689, and crowned the 11th of April following. An attempt was then made by the opposite party to secure Scotland for James II.; but on the 26th of May, 1689, the two armies meeting at Killycrankie, in the shire of Perth, Lieutenant-general Mackay, who commanded for King William, obtained a complete victory; after which the whole island of Great Britain submitted to him. In the mean time, Tyrconnel had disarmed great part of the protestants of Ireland, and formed an army of papists, amounting to 30,000 foot and 8000 horse; while the protestants in the north took up arms, and seizing on Kilmore, Coleraine, Inniskilling, and Londonderry, declared for King William and Queen Mary. Things were in this situation when James landed at Kinsale, March 12, 1688, and made his public entry into Dublin. He soon after put himself at the head of 20,000 men, and was twice reinforced by the French, who each time joined him with 5000 men. He took Coleraine and Kilmore, and laid siege to Londonderry, but soon after returned to meet his parliament in Dublin, where he passed an act to attain 2 or 3000 protestant lords, ladies, clergymen, and gentlemen, of high treason. In the mean time the siege of Londonderry was vigorously carried on. The garrison of Inniskilling, at the same time, performed wonders; particularly the day before the siege of Derry was raised, they advanced nearly 20 miles to meet about 6000 Irish, and defeated them, killing nearly 3000

though they themselves were not above 2000, and had not above 20 killed and 50 wounded. In August the Duke of Schomberg arrived in Ireland with 10,000 men, took Carrickfergus in four days, and performed several other gallant actions. In June, 1690, William landed in Ireland with a gallant army, and, on July 1. fought the memorable battle of the Boyne, in which, though he had the misfortune to lose the brave Duke of Schomberg, he gained a complete victory over the French and Irish, and obliged James to retire first to Dublin, and afterwards to France. The next year the English, under the brave General Ginkle, and other valiant commanders, made themselves masters of Baltimore; passed the Shannon amidst the fire of the enemy, and took Athlope; and, on July 12. fought the glorious battle of Ahgrim, wherein 4000 Irish, and their general St. Ruth, were slain, and all their tents, arms, &c. were taken. After this entire defeat Galway surrendered, and Limerick capitulated, by which an end was put to the Irish war, and all Ireland was reduced to the obedience of King William and Queen Mary. In the mean time the French king was pushing his conquests in the Netherlands, and other parts, which made it necessary for King William to go over to the famous congress at the Hague, in the beginning of the year 1691, in order to animate the confederate princes and states. The French were so far beforehand with the allies that they took the strong city of Mons this year, and Namur in the year following; after which was fought the famous battle of Steenkirk, wherein, though the French remained masters of the field of battle, yet King William so bravely disputed the victory, that they had scarcely any thing else to boast of, the loss being nearly equal on both sides. The king was no sooner gone abroad, in 1691, than the Jacobites resumed their favourite scheme, in concert with France, for restoring the late king. But the vigilance of Queen Mary and the government again disconcerted their measures. In July 1694, was fought the famous battle of Landen, between the allied army, commanded by King William, and the French under the Duke of Luxemburgh: and though the latter were very much superior in numbers, the former fought with such obstinate bravery, under their prudent and valiant leader, that for some time they manifestly had the advantage; and it was only the superiority of numbers that at last wrested the victory out of their hands. After this action the French made themselves masters of Charleroy. On December 23 1694, Queen Mary died of the smallpox.

in the 33rd year of her age, having reigned nearly six years jointly with her royal consort. On March 5 she was solemnly interred in the chapel of Henry VII. The year 1695 was glorious to King William and the allies, by the reduction of Namur. Marshal Boufflers having thrown himself into it, with a strong reinforcement, the garrison then consisted of 15,000 men, and they were furnished with provisions for several months; yet King William having laid siege to it in the beginning of July, carried it on with such vigour and good conduct, even in the sight of a numerous French army under Marshal Villeroy, who had advanced to relieve it, that the town surrendered on August 6. N. S. and the castle in less than a month after. The English fleet, under Lord Berkley, spread terror this summer along the coasts of France, bombarded St. Maloes, and some other towns; and, in return, Villeroy, by the French king's orders, bombarded Brussels. On the 12th of January a double plot was discovered to assassinate the king, and invade the kingdom. Many of the late king's emissaries came over from France and held consultations with papists and Jacobites here, how to murder William; and after several debates on the time, place, and manner of putting their horrid design in execution, they at last agreed to assassinate his majesty in his coach, on some day in February, 1695, in a lane between Brentford and Turnham-green as he returned from hunting. But happily the whole plot was discovered on the very night before it was to have been executed. At the same time there was to be an invasion from France; for which purpose King James was to come to Calais, and the troops, artillery, and stores, were immediately ordered to be embarked; but, by the news of the assassination plot having miscarried, and the speedily sending a formidable fleet under Admiral Russel, this other part of the design was frustrated and Calais was soon after bombarded by the English. A treaty of peace was at last happily concluded, and signed at Ryswick, by the English, Spanish, French, and Dutch plenipotentiaries, on September 20. 1697, and by the ministers of the emperor, who stood out for some time, on October 20. with as much advantage to the allies as could reasonably be expected. On the 29th of July, 1700, the young Duke of Gloucester, the only remaining child of seventeen, whom the Princess Anne had borne, died of a malignant fever, in the 11th year of his age. The King of Spain dying towards the end of this year, the Duke of Anjou was declared King of Spain by the French king, his grand-

father. The French at the same time overrunning the Spanish Netherlands, both King William and the States were obliged to acknowledge the Duke of Anjou's title, in order to gain time. On February 21. 1701, the king, who had been declining in his health for some time, fell from his horse as he was hunting, and dislocated his right collar bone; which, joined to his former indisposition, held him in a languishing state till the 8th of March, when he expired, in the 52nd. year of his age, after having reigned thirteen years, three weeks, and two days. On the 12th of April following he was interred in Henry the Seventh's Chapel, near the remains of his queen. He left no issue.

William III. was of a middle stature, a thin body, and delicate constitution, subject to an asthma and continual cough from his infancy. He had an aquiline nose, sparkling eyes, a large forehead, and a grave solemn aspect. He was very sparing of speech; his conversation was dry, and his manner disgusting, except in battle, when his deportment was free, spirited, and animating. In courage, fortitude, and equanimity, he rivalled the most eminent warriors of antiquity; and his natural sagacity made amends for the defects of his education, which had not been properly superintended. He was religious, temperate, generally just and sincere; a stranger to violent transports of passion, and might have passed for one of the best princes of the age in which he lived, had he never ascended the throne of Great Britain. But the distinguishing criterion of his character was ambition: to this he sacrificed the punctilios of honour and decorum, in deposing his father-in-law and uncle; and this he gratified at the expense of the nation that raised him to sovereign authority. He aspired to the honour of acting as umpire in all the contests of Europe: and the second object of his attention was the prosperity of that country to which he owed his birth and extraction. To sum up his character in a few words, William was a fatalist in religion, indefatigable in war, enterprising in politics, dead to all the generous emotions of the human heart, a cold relation, an indifferent husband, a disagreeable man, an ungracious prince, and an imperious sovereign.

ANNE.

This amiable and illustrious princess was descended from a race of kings the most ancient of any in Europe. She was the second daughter of James, Duke of York, afterwards King James II. by Mrs. Anne Hyde, eldest daughter

of Edward, Earl of Clarendon. The Duke was privately married to this lady, during his first exile, in 1659. In 1660, she was, by an order of council, declared **Duchess of York**, and to have the precedency of the **Princess of Orange** and the **Queen of Bohemia**. The Duchess died at the palace of St. James's, March 31. 1671. She had issue by the duke four sons and four daughters; Charles, born October 22. 1660; Mary, born April 30. 1662; James, born July 12. 1663; Anne, born February 6. 1664; Charles, born July 4. 1665; Edgar, born September 14. 1667; Henrietta, born January 13. 1669; and Catharine, born February 9. 1670: of whom Charles, James, Charles, and Henrietta, died in her lifetime, and Edgar and Catharine did not survive her a year; but Mary and Anne lived to be queens of England. The Princess Mary was about nine years old, and Anne about seven, at the death of their mother.

On the death of William III. which happened on Sunday, March 8. 1702, the Princess Anne was proclaimed **Queen of Great Britain, France, and Ireland**, in the cities of London and Westminster, and was crowned on the 23rd of April following. During her reign the honour of the British arms was carried to an amazing height, particularly by the Duke of Marlborough, who humbled the pride of France by a number of the most glorious victories. The nation being at the same time at war with Spain, the Duke of Ormond and Sir George Rooke took Vigo, when eleven French men of war were burnt, and ten taken; six galleons were sunk, and eleven taken. On the 24th of July, 1704, Sir George Rooke took Gibraltar, after a siege of two days. The next year the Earl of Peterborough took the city of Barcelona, and several other places in Spain; and in 1706 the Earl of Galway, at the head of 20,000 men, took Alcantara, a city of Portugal. In 1708 Major-general Stanhope landed with 3000 men on the island of Minorca, and attacked fort St. Philip, where the garrison, which consisted of 1000 Spaniards and 600 French, surrendered in three days; the men were made prisoners of war, and the whole island was conquered in three weeks.

These wars were concluded by the treaty of Utrecht, in 1713, by which Spain and Spanish America were confirmed to King Philip; but the Netherlands, and the Spanish dominions in Italy, were separated from that monarchy. Their Italian dominions consisted of the kingdoms of Naples, Sicily, Sardinia, and the duchy of Milan; of which Naples, Sardinia, and Milan, were bestowed on the empe-

101; and Sicily, with the title of king, was given to the Duke of Savoy. The Dutch had a barrier given them against France in the Netherlands; while Harley and Bolingbroke, the new ministry, in compliance to France, only insisted on the demolition of Dunkirk, and the possession of Gibraltar, Minorca, and Nova Scotia, though much better terms had been before offered by the French. Queen Anne procured a law for the rebuilding fifty new churches within the bills of mortality, with an augmentation of the livings of the poor clergy; and in 1706 the union of the two kingdoms of England and Scotland took place. The queen died at Kensington, on the 1st of August, 1714, in the 50th year of her age, and the 13th year of her reign. She had been married to his Royal Highness Prince George of Denmark, July 28. 1683, by whom she had several children, who died young.

Anne Stuart, Queen of Great Britain, was in her person of a middle size, majestic, and well proportioned. Her hair was of a dark brown colour, her complexion ruddy, her features regular, and her countenance round and handsome. Her voice was clear and melodious, and her presence engaging. She was indeed deficient in that vigour of mind by which a prince ought to preserve his independence, and avoid the snares of sycophants and favourites; but, whatever her weakness in this particular might have been, the virtues of her heart were never called in question. She was a pattern of conjugal affection and fidelity, a tender mother, a warm friend, an indulgent mistress, a munificent patroness, and a merciful princess, during whose reign no subject's blood was shed for treason. In a word, if she was not the greatest, she was certainly one of the best and most unblemished sovereigns that ever sat upon the throne of England.

GEORGE I.

George I. was created Duke of Cambridge, October 6. 1706, and on the death of Queen Anne succeeded to the crown of Great Britain. He was the eldest son of Ernestus Augustus, Duke, afterwards Elector, of Brunswick Lunenburgh (or Hanover) by the Princess Sophia, daughter of Frederic, Elector-palatine, and King of Bohemia, and of Elizabeth, eldest daughter of James I. He was born May 28. 1660, and succeeded his father as Elector of Brunswick Lunenburgh in 1698. The regency met and gave orders immediately for his proclamation. On September 18 he

landed, with the prince his son, at Greenwich, and on the 20th they made their public entry through the city to St. James's, attended by above 200 coaches and six of the nobility and gentry. The prince royal was declared Prince of Wales; the king was crowned October 20: and a new parliament met on March 17. 1715. In July the king gave the royal assent to an act for preventing tumults and riotous assemblies, commonly called the Riot Act, which is still in force.

This year a rebellion broke out, which was headed by the Earl of Mar, in Scotland, who set up the Pretender's standard, in September, in the Highlands, and caused him to be proclaimed in several places; when the Earl of Derwent-water and others appeared in arms in the north of England, and proclaimed the Pretender in several places. On November 12 they were attacked by the king's troops, commanded by the generals Wills and Carpenter, in Preston, where, after a smart firing from the windows, finding all the avenues to the town blocked up by the king's troops, on the 13th they desired to capitulate; but, no other terms being allowed them than submitting to the king's mercy, on the 14th, at seven in the morning, they submitted. On the very day the rebels were subdued at Preston, the Duke of Argyle defeated the rebel army, under the Earl of Mar, consisting of about 8 or 9000 men, at Sheriff-muir, about four miles from Aberdeen; and the Earl of Mar retreated to Perth, after an obstinate fight, in which both sides claimed the victory, though the earl being frustrated in his design of crossing the Forth, showed that the king's forces had the advantage. On December 22 the Pretender arrived in a Dunkirk privateer in Scotland, where he was met and complimented by the Earl of Mar, and others of his adherents; but, being closely pursued by the king's troops, on February 14. the Pretender, with the Earl of Mar, and some chiefs, found means to make their escape to a French ship which lay there: soon after which the rebels were conducted into the mountains by Gordon, their general, where they dispersed. Some submitted, and some were taken prisoners. Among them was their general Foster, as also the earls of Derwent-water, Nithisdale, Darnwarth, Wintoun, and other noblemen. The lords Derwent-water and Kenmuir were beheaded on Tower Hill, February 24. 1715-16; Nithisdale and Wintoun made their escape out of the Tower; and after the execution of some of the rebels an act of grace passed. Robert Walpole, Esq.

was some time before made first commissioner of the treasury, and chancellor of the exchequer; and about the same time, the parliament attainted James Butler, Duke of Ormond of high treason, and confiscated his estate. A few weeks after the king gave the royal assent to an act for enlarging the time of continuance of parliament for seven, instead of three years, as by the triennial act passed in the reign of King William.

A quadruple alliance was signed at London, July 22. 1718, between the emperor, Great Britain, and Holland. On July 31. Sir George Byng entirely defeated the Spanish fleet in the Mediterranean, the Spaniards having attacked the citadel of Messina, in Sicily, which was agreed to be given up to the emperor. War was declared against Spain in December following, both by Great Britain and France.

On the 15th of April, 1721, the Princess of Wales was delivered of William Augustus, the famous Duke of Cumberland. A new parliament met on October 2, 1722, when the king acquainted them with a conspiracy for overturning the established government, and setting up the Pretender. Christopher Layer, a counsellor of the Temple, was executed at Tyburn, May 17. 1723, and his head fixed upon Temple-bar, for being concerned in it. The parliament passed bills for inflicting pains and penalties on bishops Atterbury, Kelley, and Plunket, on the same account, whereby the first was banished, and the two last imprisoned for life. In 1725 the Earl of Macclesfield, lord high chancellor, resigned the seals; he was fined £30,000 and committed to the Tower till he paid it. He was succeeded by Sir Peter King, lord chief justice of the common pleas.

On September 3. 1725, a treaty was concluded between Great Britain, France, and Prussia; though the last, in effect, soon deserted this alliance; but the States General afterwards acceded to it. This treaty was designed as a balance to one which had been concluded between the courts of Vienna and Madrid. These counter-alliances put Europe again in a flame, and three British squadrons were fitted out; one sent to the West Indies, another to the coast of Spain, and a third to the Baltic. In the beginning of the year 1727 the Spaniards laid siege to Gibraltar; which though it was suspended upon preliminary articles for a general pacification being signed, was not ratified till some time after the king's death. On June 3 his majesty embarked on board the *Carolina* yacht, and landed on the 7th at Vaert, in Holland, where he lay that night,

On the 9th he arrived at Delden, between eleven and twelve at night, seemingly in good health. He set out the next morning about three o'clock, was taken ill on the road, and died at his brother's palace, at Osnaburgh, June 11. 1727, in the 68th year of his age, and the 13th of his reign.

George I. was plain and simple in his person and dress; grave and composed in his deportment, though easy, familiar, and facetious, in his hours of relaxation. Before he ascended the throne of Great Britain he had acquired the character of a circumspect general, a just and merciful prince, and a wise politician, who perfectly understood and steadily pursued his own interest. With these qualities it cannot be doubted but that he came to England extremely well disposed to govern his new subjects according to the maxims of the British constitution, and the genius of the people; and if ever he seemed to deviate from these principles, we may take it for granted that he was misled by the venal suggestions of a ministry, whose power and influence were founded on corruption.

GEORGE II.

George II. then in the 44th year of his age, was proclaimed King of Great Britain on the 15th of June, 1727, being the day after the express arrived with the account of the death of his father. On the 11th of October the coronation of the king and queen was performed at Westminster Abbey, with the usual solemnity.

In the beginning of December, his majesty's eldest son, Prince Frederic, arrived in England, from Hanover, where he had hitherto resided: he was introduced into the privy council, and created Prince of Wales.

The Spaniards still continued their depredations with impunity on the commerce of Great Britain. The court of Spain indeed, at this juncture, seemed cold and indifferent with regard to a pacification with England. In September, 1720, Victor Amadeus, King of Sardinia, resigned his crown to his son, Charles Emmanuel, Prince of Piedmont. The father reserved to himself a revenue of 100,000 pistoles per annum, retired to the Castle of Chamberry, and espoused the Countess Dowager of St. Sebastian.

On the 1st of February, 1733, died Augustus II. King of Poland, which gave rise to a dreadful war in Europe. Three parties were formed on this occasion.

In 1734 King Stanislaus was obliged to flee secretly

from Dantzic, and leave the crown of Poland to Augustus, Elector of Saxony. England during these transactions preserved a neutrality. At length a quarrel breaking out between the courts of Madrid and Lisbon, the latter applied for assistance to the King of Great Britain, who sent Sir John Norris with a powerful squadron to Lisbon.

On the 27th of April, 1736, the Prince of Wales was married to the Princess of Saxe-Gotha.

The beginning of the year 1737 was distinguished by a rupture in the royal family, occasioned by the Prince of Wales carrying away the Princess of Wales, then near her time, from Hampton Court, where their majesties resided, to St. James's, where she was that night delivered of Augusta, now Princess of Brunswick. On the 20th of November died Queen Caroline, in the 55th year of her age. The dissension still subsisted between the Prince of Wales and his father, who ordered the lord chamberlain to signify publicly, that no person who visited the prince should be admitted to the court at St. James's. In 1739 war was declared against Spain, and Admiral Vernon sent in July, with a squadron of ships, to annoy their commerce and settlements in America; where, in November, he took the town of Porto Bello, with only six ships. The next year advice was received from Admiral Vernon, that he had bombarded Carthagena, and taken Fort Chagre. On the 20th of October, Charles VI. Emperor of Germany, the last prince of the house of Austria, died at Vienna, and was succeeded in his hereditary dominions by his eldest daughter, the Archduchess Maria Theresa. The young King of Prussia was no sooner informed of the emperor's death than he entered Silesia at the head of 20,000 men, and seized certain fiefs to which his family laid claim. The Elector of Bavaria refused to acknowledge the archduchess as Queen of Hungary and Bohemia.

The year 1741 was remarkable for General Wentworth and Admiral Vernon's unsuccessful expedition against Carthagena, owing to a disagreement which arose between them.

By the happy influence of his Britannic majesty a treaty was concluded between Austria and Prussia, whereby Silesia was given up to the latter; to which treaty Saxony also acceded, and peace was proclaimed at Dresden on the 17th of September, 1742. This obliged the French to retire with great precipitation and loss to Prague, which

Prince Charles besieged with 60,000 men, there being 26,000 men in that city. Negotiations were carried on between the generals on the respective sides.

The Queen of Hungary now began to triumph over all her enemies; the French were driven out of Bohemia, and Prince Charles, her general, at the head of a large army, invaded the dominions of Bavaria. The elector was obliged to fly before her; and abandoned by his allies and stripped of all his dominions, he repaired to Frankfort, where he lived in indigence and obscurity. He now made advances towards an accommodation with the Queen of Hungary; and agreed to continue neuter during the remainder of the war, while the French, who first began it as allies, supported the burden. In the Netherlands the English and French armies came to an engagement at the village of Dettingen, June 26, 1743. The order of battle, as directed by his Britannic majesty, was very masterly. The king advancing to the front of his army, gave fresh spirits to the soldiers. The British troops fired too soon upon the marching up of the enemy; when the French black musquetaires, detaching themselves from their lines, and galloping between the allied foot, were all cut to pieces. The firing now became general; and the presence of his Britannic majesty, who was in the posts of the greatest danger, and behaved with the noblest intrepidity, fixed the fate of the day. Marshal Noailles showed great bravery in this battle, The Duke of Cumberland, being in the hottest of the engagement, was wounded in the calf of his leg. Hereupon Marshal Noailles, after losing the flower of his army, ordered a retreat. In this battle the French lost 6000 men, and a multitude of officers, with some trophies; and the English 2500 men.

In 1741 Commodore Anson returned from his expedition round the world. The French went on with vigour in every quarter; they opposed Prince Charles of Lorraine; interrupted his progress in his attempt to pass the Rhine, and gained some success in Italy; but their chief expectations were placed in a projected invasion of England. The troops designed for this expedition amounted to 15,000. The Duke de Roquefeuille, with twenty ships of the line, was to see them landed safely in England; and Count Saxe was to command them when put ashore. The whole project, however, was disconcerted by the appearance of Sir John Norris, with a superior fleet, making up against them; the French fleet was obliged to put back; a very

hard gale of wind damaged their transports beyond redress. All hopes of invasion were now frustrated; and at length the French thought fit openly to declare war. The combined fleets of France and Spain for some time fought the British armament under the admirals Matthews and Lestock, though with inferior force, and came off nearly upon equal terms. Such a parity of success in England was regarded as a defeat. Both the English admirals were tried by a court-martial; Matthews, who had fought the enemy with intrepidity, was declared incapable of serving for the future in his majesty's navy; Lestock, who had kept aloof, was acquitted with honour, as he had intrenched himself within the punctilios of discipline: he barely did his duty; a man of honour, when his country is at stake, should do more. The proceedings in the Netherlands were still more unfavourable. The French besieged and took Friberg, before they went into winter quarters; and early the next campaign invested the city of Tournay. The allies were resolved to prevent the loss of this city by a battle. Their army was inferior to the French; notwithstanding this disadvantage, on the 30th of April, 1745, the Duke of Cumberland marched to the attack at two in the morning. The British infantry pressed forward, bore down all opposition, and for nearly an hour were victorious. Marshal Saxe was at that time sick of the same disorder of which he afterwards died. He visited all the posts in a litter; and saw, notwithstanding all appearances, that the day was his own. The English column, without command, by a mere mechanical courage, had advanced upon the enemy's lines, which formed an avenue on each side to receive them. The French artillery began to play upon this forlorn body, and though they continued a long time unshaken, they were obliged to retreat about three o'clock in the afternoon. The allies left nearly 12,000 men upon the field of battle, and the French bought their victory with almost an equal number. This blow, by which Tournay was taken, gave the French a manifest superiority during the continuance of the war.

The son of the old Pretender now resolved to make an effort at gaining the British crown. Being furnished with some money, and still larger promises from France, he embarked for Scotland on board a small frigate, accompanied by the Marquis Tullbardine, and a few other desperate adventurers. For the conquest of the whole British empire he brought with him seven officers, and arms for 2000 men. He landed on the coast of Lochabar, July 27, and was in a

little time joined by some Highland chiefs and their vassals. He soon saw himself at the head of 1500 men, and invited others to join him by manifestoes, which were dispersed throughout all the Highlands. The ministry was no sooner informed of the truth of his arrival than Sir John Cope was ordered to oppose his progress. In the mean time the young adventurer marched to Perth, where his father, the Chevalier de St. George, was proclaimed King of Great Britain. The rebel army advanced towards Edinburgh, which they entered without opposition. Here, too, the pageantry of proclamation was performed. But though he was master of the capital, yet the citadel, or castle, with a good garrison under the command of General Guest, braved all his attempts. Sir John Cope, who was now reinforced by two regiments of dragoons, resolved to march towards Edinburgh and give him battle. The young adventurer attacked him near Preston Pans, and in a few minutes totally routed him and his troops. In this victory the king lost about 500 men, and the rebels not above 80.

In the mean time the Pretender went forward with vigour; and having advanced to Penrith, continued his irruption till he came to Manchester, where he established his headquarters; from thence he prosecuted his route to Derby; but he determined once more to return to Scotland. He effected his retreat to Carlisle without any loss; and having reinforced the garrison of the place, crossed the rivers Eden and Solway into Scotland.

After many attacks and skirmishes the Duke of Cumberland put himself at the head of the troops at Edinburgh, which consisted of about 14,000 men. He resolved to come to a battle as soon as possible, and marched forward, while the young adventurer retired at his approach. The duke advanced to Aberdeen, where he was joined by the Duke of Gordon, and some other lords. The Highlanders were drawn up in order of battle on the plain of Culloden, to the number of 8000 men. The duke marched thither, and the battle began about one o'clock in the afternoon, April 16. In less than thirty minutes the rebels were totally routed, and the field was covered with their dead bodies. The duke, immediately after the battle, ordered thirty-six deserters to be executed. At length a general peace was proclaimed in London, on February 2, 1749.

On the 7th of May, 1756, his Britannic majesty declared war against France, and sent Admiral Byng, with a strong fleet to the relief of Minorca: but as he neglected to fulfil

his instructions, the place was lost, and he was tried and shot at Portsmouth. During these transactions Mr. Clive, one of the clerks of the East Indian Company, distinguished himself in the East Indies, obtaining the rank of colonel, and had such amazing success, that all the towns and factories of the French on the coasts of Coromandel, except Pondicherry, were in a few years taken by the English. On the other hand, in 1758, the Duke of Marlborough landed near St. Maloes, in France, and burnt many ships, with a great quantity of naval stores. Lieutenant-general Bligh and Captain Howe took Cherburg, and demolished the fortifications. Soon after Captain Marsh took Senegal, and Commodore Keppel the island of Goree, on the coast of Africa. On the 26th of July Cape Breton was retaken by General Amherst and Admiral Boscawen. Soon after Fort Frontenac surrendered to Lieutenant-general Bradstreet, and Fort Du Quesne to General Forbes. On the 1st of May, 1759, the island of Guadaloupe surrendered to the English. In the same month, Marigalante, Santos, and Deseada, became subject to Great Britain.

On August 1 was fought the glorious battle of Minden, in which about 7000 English defeated 80,000 of the French regular troops.

The command of the expedition against Quebec, the capital of French Canada, was given to General Wolfe, a young officer of a true military genius. Wolfe's courage and perseverance surmounted incredible difficulties; he gained the heights of Abraham, near Quebec, where he fought and defeated the French army, but he was himself killed. General Amherst, who was the first English general on command in America, conducted another expedition; and Canada shortly became subject to Great Britain.

The affairs of the French being now desperate, and their credit ruined, they resolved upon an attempt to retrieve all by an invasion of Great Britain; but on the 18th of August, 1759, Admiral Boscawen attacked the Toulon squadron commanded by M. De la Clue, near the Straits of Gibraltar, took three ships, and burnt two.

On the 20th of November Sir Edward Hawke defeated the Brest fleet, commanded by Admiral Conflans, off the island of Dumet, in the Bay of Biscay. After this engagement the French gave over all thoughts of their intended invasion of Great Britain.

In February, 1760, Captain Thurot, a French marine adventurer, who, with three sloops of war, had alarmed the

coasts of Scotland, and actually made a descent at Carrickfergus in Ireland, was, on his return from thence, defeated and killed by Captain Elliot, who was the Commodore of three ships inferior in force to the Frenchman's squadron.

On the 26th of October, 1760, George II. died suddenly, full of years and glory, in the 77th year of his age, and the 33rd of his reign. He was interred on the 10th of November, at Winchester.

George II. was rather low of stature, well shaped and erect, with eyes remarkably prominent, a high nose, and fair complexion. In his disposition he is said to have been hasty, prone to anger, especially in his youth, yet soon appeased; otherwise mild, moderate, and humane; in his way of living, temperate and regular. He was fond of military pomp and parade, and personally brave. He loved war as a soldier, studied it as a science, and corresponded on the subject with some of the greatest military characters in Germany. The circumstances that chiefly mark his public character were a predilection for his native country, and a close attention to the political interests of the Germanic body.

GEORGE III.

George III. the eldest son of Frederic, Prince of Wales, was born on the 4th of June, 1738, and proclaimed King of Great Britain on the 26th of October, 1760. The brighter the national glory was at the time of George the Second's death, the more arduous was the province of his successor. This prince chose for his first minister the Earl of Bute, with whom he had been acquainted from his earliest youth; and the first acts of his reign convinced the public that the death of his predecessor would not relax the operations of the war. Accordingly, in 1761, the island of Belleisle, on the coast of France, surrendered to his majesty's ships and forces under Commodore Keppel and General Hodgson; as did the important fortress of Pondicherry, in the East Indies, to General Coote and Admiral Stevens. The operations against the French West Indies still continued, under General Monckton, Lord Rollo, and Sir James Douglas; and in 1762 the island of Martinico, hitherto deemed impregnable, with the island, of Grenada, Grenadillas, St. Vincent, and others of less note, were subdued by the British arms, with inconceivable rapidity. By this time the famous family compact among all the branches of the Bourbon family had been concluded; and it was found necessary to

declare war against the Spaniards, who having been hitherto no principal in the quarrel, had scandalously abused their neutrality in favour of the French. A respectable armament was fitted out under Admiral Pocock, having the Earl of Albemarle on board, to command the land forces; and the vitals of the Spanish monarchy were struck at by the reduction of the Havannah, the strongest and most important fort which his catholic majesty held in the West Indies. The capture of the *Hermione*, a large Spanish register ship, bound from Lima to Cadiz, the cargo of which was valued at a million sterling, preceded the birth of the Prince of Wales, and the treasure passed in triumph through Westminster to the Bank the very hour he was born. The loss of the Havannah, with the ships and treasures there taken from the Spaniards, was succeeded by the reduction of Manilla, in the East Indies, by General Draper and Admiral Cornish, with the capture of the Trinidad, reckoned worth three millions of dollars. To counteract these dreadful blows given to the family compact, the French and Spaniards opened their last resource, which was to quarrel with and invade Portugal, which had been always under the peculiar protection of the British arms. Whether this quarrel was real or pretended, is not for us to determine. It certainly embarrassed his Britannic majesty, who was obliged to send thither armaments both by sea and land; but these found no great difficulty in checking the progress of the Spaniards. The enemy, at last, granted such terms as the British ministry thought admissible, and adequate to the occasion. A cessation of arms took place in Germany, and in all other quarters; and on the 10th of February, 1763, the definitive treaty of peace between his Britannic majesty, the King of France, and the King of Spain, was concluded at Paris, and acceded to by the King of Portugal. The ratifications were exchanged at Paris on the 10th of March; on the 22nd of the same month peace was solemnly proclaimed at the usual places in Westminster and London; and the treaty having been laid before the parliament, met with the approbation of a majority of both houses.

In the East Indies, in 1764, the nabob set up by Lord Clive was deposed; and the factory not agreeing with the nabob's successor, 4000 of the garrison and inhabitants of Patna were put to the sword, and the town plundered, besides several of the English being surprised and cut to pieces. Upon these and other acts of hostility war was declared against the nabob, Cossim Ali Cawn; and the former nabob,

Meer Jaffier, was soon restored, who thereupon entered into a more advantageous treaty with the company. Soon after an action took place, in which the English were victorious. After this success the city of Moorsheabad became an easy conquest; and, not long after, the restored nabob, Meer Jaffier, was proclaimed. In the mean time the French took possession of Turk's Island, and of nine sail of English ships; they then destroyed every house and secured all the slaves they could find. Major Adams, however, the English commander, again routed the enemy, and carried Rajamoul by assault, when Patna soon surrendered.

In 1766 peace was established in the East Indies by Lord Clive, who returned the following year: but a new enemy now started up; Hyder Ally, who from a common soldier had become a prince of a large tract of territory on the Malabar coast, in confederacy with the viceroy of the Decan, declared war against the English. The council of Madras sent a body of troops, under Colonel Smith who obtained a complete victory over them, when the viceroy immediately made peace with the English. Hyder Ally took refuge among the mountains, from whence he made frequent incursions. In 1768 a small fleet forced into Mangalore, one of Hyder's principal sea-ports, and carried off his fleet. This war continued till the next year, when peace was proposed to Hyder, and accepted. Having thus finished the affairs of the east, we must return to the transactions at home.

During the administration of Mr. Grenville, in 1765, bills passed for laying a stamp duty on the British colonies in America, which first laid the foundation of those quarrels between the colonies and the mother country which ended in a total separation. This measure was no sooner known in America than insurrections commenced there, and great murmurings at home. In consequence of which the ministry retired, and the act was repealed.

The next year several changes in the ministry took place; the Duke of Grafton was appointed First Lord of the Treasury, and Mr. Pitt, who had been created Earl of Chatham, was made Lord Privy Seal; but Lord North was soon after placed at the head of administration.

While matters were in this situation at home, they were getting much worse in America, where the joy which the repeal of the stamp act had occasioned was of short duration. New duties were laid on paper, glass, tea, and other articles; but as a general combination seemed forming not

to take any of those commodities from the mother country, the acts were repealed, except the duties on tea. Laws were also passed, which gave great umbrage, for quartering troops in America, for suspending the legislative power at New York, and for appointing governors in the colonies, who were to be paid by the crown. Some vessels, laden with tea, attempted to land in America ; but at Boston and South Carolina the teas were thrown into the sea, and from other places the ships returned with their cargoes untouched. These preceeding enraged the government of England, which passed acts for shutting up the port of Boston, and for altering the constitution of Massachusetts' Bay and Quebec, so that the magistrates might be appointed by the King of England.

In this situation of affairs the Americans entered into an agreement not to trade with Great Britain till these acts were repealed. At the same time the delegates appointed from the English colonies avowed their loyalty to his majesty, but supplicated him to order a change of measures. This petition of the congress was rejected, and the application of their agents to be heard at the bar of the House of Commons was refused ; and finally a bill of the Earl of Chatham's, to accomodate the troubles of America, was rejected in the House of Lords.

The Americans, finding themselves thus treated, began to train their militia with great industry. They erected powder-mills in Philadelphia and Virginia, and began to prepare arms in all the provinces ; nor were these preparations fruitless, as will evidently appear from what followed. On the 19th of April, 1775, General Gage detached a party to seize some military stores at Concord, in New England. Several skirmishes ensued, many were killed on both sides, and the troops would probably have been all cut off, if a fresh body had not arrived to their relief. Arms were now taken up in every quarter, and they assumed the title of *The United Colonies of America*. The first resolutions were for raising an army, for establishing an extensive paper currency, and for stopping all exportations to those places which still retained their obedience. About 240 provincials next took the garrisons of Ticonderago and Crown Point without any loss of men ; and here they found plenty of military stores. Great Britain increased her army, and sent over the generals Howe, Burgoyne, and Clinton.

These inimical proceedings did not terrify the congress, who encouraged the people of Massachusetts' Bay to resume

their chartered rights, ordered the blockade of Boston to be discontinued; and, that they might secure Charlestown, in one night, they raised very considerable works on Bunker's Hill. As soon as they were discovered in the morning a heavy fire ensued from the ships, the floating batteries, and from Cop's Hill, in Boston. This they sustained, and were with difficulty driven from their entrenchments in the evening by a large party, under the conduct of the generals Howe and Pigot. The contest was severe, Charlestown was burnt, 226 of the English officers and men were killed. The Americans then threw up works on the other side of Charlestown Neck; so that the troops were as closely invested as they had been at Boston.

George Washington, Esq. was about this time appointed to the command of the American army; the congress published spirited memorials of their reasons for taking up arms, and offered a second fruitless petition to the king. Their generals were then ordered to endeavour to subjugate those colonies that espoused the cause of Great Britain. Two parties were sent against Canada, under General Montgomery and Colonel B. Arnold, who boldly undertook to march by an untried route, from Boston to Quebec. After innumerable difficulties they reached the town, which they first attempted to take by storm, and then to block up. In this attempt Montgomery fell, and Arnold, who was dangerously wounded, was forced to make a hasty retreat. In the mean time General Carleton, the governor of Canada, received fresh supplies from England.

In 1776 Boston was bombarded and evacuated; when General Washington took possession of it, and General Howe removed his troops to Halifax. While the breach was thus widening in America, several members of the British senate were at home endeavouring to bring matters to a reconciliation; but it was not the disposition of the reigning ministry to give up any thing that they apprehended could promote their wild and chimerical schemes.

In July a fruitless attack was made upon Charlestown, in which the English suffered considerably. About this time, General Howe landed, and drove the Americans out of Long Island, who abandoned New York to the British forces. Offers of reconciliation were now made by Howe, and rejected. Sir Peter Parker and General Clinton took Rhode Island, and the English also made some incursions into the Jerseys. General Washington soon after surprised and took prisoners above 900 of the Hessian troops in our

service, with several stands of arms. Privateers were also fitted out from England and America, who continually made prizes of each other, and matters were carried on with great animosity on both sides.

The next year there were two actions between the generals Howe and Washington, and Philadelphia surrendered to the king's troops. A plan was now formed for invading the revolted colonies by way of Canada, and General Burgoyne undertook the expedition ; but after many difficulties, and some desperate actions, this army was obliged to surrender themselves prisoners of war to Gates and Arnold. Our expedition up the North river was more successful, under Clinton and Vaughan ; the former of whom, soon after, succeeded General Howe as commander in chief ; and after evacuating Philadelphia, he retreated with his army to New York.

In 1778 the French entered into an alliance with the Thirteen United Colonies : and as affairs wore so gloomy an aspect the Earl of Carlisle, William Eden, and George Johnstone, Esqrs. were sent as commissioners to treat of peace ; but the hour was past, and the terms were rejected with disdain. The war was then carried on with mutual animosity, and the whole of Georgia was reduced by the British forces. Hostilities next commenced with France ; and the English Admiral Keppel engaged the French fleet, under Count D'Orvilliers. Not a ship was taken on either side ; and upon some censure being passed on Vice-admiral Sir Hugh Palliser's conduct, he applied to Keppel for redress, which was denied. He then exhibited articles of accusation against Keppel, who was tried, and honourably acquitted. Palliser was next tried, and acquitted ; and there the farce ended.

In the mean time Sir Edward Vernon, in the East Indies, drove off the French under De Tronjolly ; and soon after Pondicherry surrendered to the arms of England, as did St. Lucia, in the West Indies. Dominica, St. Vincent, and Grenada, however, were taken by the French, who, in 1779, assisted the Americans with a fleet under Count D'Estaing. But General Prevost repulsed the Americans and their allies at Savannah, and the latter were soon obliged to abandon the enterprise. In this year the French made an unsuccessful attempt on the island of Jersey ; and, some time after, Sir Hyde Parker took several of their ships. Spain now joined France against us, took New Orleans on the Mississippi, and laid siege to Gibraltar with great ardour.

The combined fleets of France and Spain rode triumphant in the Channel, but separated without effecting any thing.

Sir G. B. Rodney, in the beginning of 1780, with a large fleet, captured seven vessels, and a few days afterwards captured five Spanish ships of the line, one was lost by being driven on shore, and another was blown up. In April and May, the same admiral, after throwing supplies into Gibraltar, had three undecisive engagements with the French fleet in the West Indies, where several of our ships suffered dreadfully in a hurricane, and some were lost. In July Admiral Geary took twelve French merchant ships: but the combined fleets, in August, took five English East Indiamen, and fifty merchant ships bound for the West Indies.

In America General Clinton took possession of Charlestown; Earl Cornwallis obtained a victory over General Gates; and Colonel Tarleton acquired fame by his conduct in several skirmishes. In July a fleet and a large body of troops from France arrived at Rhode Island.

At this time a rupture was expected with the Dutch, who had for some time past privately assisted the Americans. In January Commodore Fielding took several ships with naval stores on board, which were under convoy of the Dutch admiral; and, in September, Keppel captured a congress packet boat, on board of which was Mr. Lawrens, late president of the congress, among whose papers was found the plan of a treaty between America and Holland. Mr. Lawrens was committed to the Tower, and fresh applications were made to the States General: but as no satisfactory answer could be obtained, hostilities were declared by the English, on December 20. 1780.

In 1781 the war with Holland began vigorously. Admiral Rodney and General Vaughan took the islands of St. Eustatius, St. Martin, Seba, and St. Bartholomew, with a Dutch flag ship of 60 guns, a frigate of 38, and above 200 smaller vessels. However, we did not long enjoy the former part of this victory; for before the close of the year, St. Eustatius, by some unaccountable misconduct, was taken by the French; and the Dutch colonies of Demerara and Issequibo surrendered to Admiral Rodney. Commodore Johnstone took four Dutch East Indiamen in the Bay of Saldannah, where a fifth was burned; and Admiral Parker had a very severe engagement with the Dutch fleet off the Dogger Bank. One of the enemy's ships sunk in the night, but none were taken.

Our army in America still continued their operations with different success. Fort Anne and Fort George surrendered to General Carleton. Great expectations were now formed from the discontent of some rebel troops on the Pennsylvania line; but all attempts on our part to induce them to join the royal army proved fruitless. Admiral Arbuthnot engaged the French fleet in America, and assisted the generals Phipps and Arnold in ravaging Virginia. Skirmishes were frequent; but Earl Cornwallis, by rapid marches, prevented the junction of the rebel armies. On the other hand, a party under Colonel Tarleton suffered much in an engagement with General Morgan. In the mean time Wilmington surrendered to the royal arms, and some batteries were destroyed. Earl Cornwallis gained a victory over General Green, near Guildford, in North Carolina; and a second engagement with Lord Rawdon followed. However, the day was now hastily arriving, in which Britain was to give up all hopes of ever conquering America; for soon after De Grasse reached the Chesapeake; and, before Admiral Greaves could attack him, General Washington, with his assistance, surrounded Earl Cornwallis's troops, who were obliged to surrender themselves prisoners of war to the combined forces of France and America.

In 1782, after the surrender of Earl Cornwallis, our war with America appeared desperate, and every one seemed desirous of bringing it to a conclusion, except those whose ambition or ignorance had been the cause of it. Sir James Lowther (the late Earl of Lonsdale) therefore moved, in the House of Commons, that all further attempts to reduce the Americans by force would be injurious to the true interests of Great Britain. After a long and vigorous debate the motion was rejected. The mode of exchanging prisoners was next canvassed; and Mr. Lawrens was ordered to be released from the Tower. A motion was next made for addressing his majesty to put a stop to the American war; and the motion was lost by one vote only. A second motion was then made and agreed to. Addresses were presented to the king, a complete change of administration followed, and the negotiations for a general peace commenced. The independency of America was allowed. Some little skirmishes, however, took place; and the refugees, in British pay, after taking a fort on Tom's river, hanged the commander of it, to revenge some cruelties with which he was charged. This violently enraged the Americans, and General Washington demanded the officer.

who had condemned him, as a murderer. This was refused ; on which Captain Asgill, of the guards, was, by lot, ordered into confinement, and doomed to suffer in his stead. However, after a most painful suspense, he was released. His mother, Lady Asgill, applied to the French minister, Count de Vergennes, whose intercession with General Washington, strengthened by the generous interference of the Queen of France, procured life and liberty to the unfortunate victim.

Sir Guy Carleton afterwards succeeded Sir Henry Clinton in the command. He immediately acquainted General Washington that Admiral Digby and himself were empowered to treat of peace with the people of America ; and after the king's troops had evacuated Savannah, the province of Georgia, and Charlestown, the provisional articles were signed at Paris, on the 30th of November. Thus terminated this inglorious war, in which so many valuable lives had been lost, and so many millions of money had been squandered away, to gratify the ambition of a few individuals, and to enrich some unprincipled contractors, who now bask in the sunshine of affluence, at the expense of their country.

While matters were thus drawing to a crisis at home, Tanjour and Trichinopoly were delivered from the depredations of Hyder Ally. Intelligence also arrived, that General Coote had laid siege to Tripassore, and gained a second complete victory over Hyder's army. Sir Hector Monro, and Sir Edward Hughes, possessed themselves of the Dutch settlement of Negapatam and Fort Ostenburg ; Hyder's troops evacuated all their posts in the Tanjour ; and several petty princes who had revolted returned to their obedience. Sir Edward Hughes next took Trincomalee in the island of Ceylon, with two Dutch ships, and several small vessels. Major Abington relieved Tellicherry, which Hyder had besieged, and routed the enemy, taking from them 1500 prisoners, military stores, and treasure to a great amount. The French, however, with Hyder's son, Tippoo Saib, defeated the company's troops soon after, and either captured or destroyed the whole detachment. Cuddalore also capitulated to the French. Hostilities afterwards ceased between the Mahrattas and the company's forces ; but M. Suffrein, with the French fleet, coming to the assistance of Hyder, took Pernacoli. Several engagements followed between Admiral Hughes and Suffrein, some of which were desperate, but none decisive.

Though we took a vast number of prizes from the French, yet they made themselves masters of Minorca, as they did of Nevis and St. Christopher, in the West Indies ; and Demerara and Issequibo soon shared the same fate. Soon after Admiral Rodney had a partial engagement with the Count de Grasse, who retired to Gnadaloupe to refit ; but not long after the two fleets met, and a general engagement commenced, which lasted twelve hours, when four French ships were taken, and one sunk ; a fifth was taken, but blew up. Admirel Hood captured four, and Admiral Barrington two ships of war, and ten sail under their convoy. The Count de Grasse was taken, and brought to England ; but most of the prizes, with some of our own ships, were lost in their passage.

The Spaniards took from us the Bahama Islands, and continued the siege of Gibraltar with a vigorous perseverance ; but all their efforts were rendered ineffectual by the bravery and conduct of General Elliot. He again permitted them almost to complete their works, when he began such a heavy fire of carcasses, hot shot, and shells, that several of their batteries were damaged, and some destroyed. The English also forced seven Spanish and two French ships of the line, with several smaller ones, to retreat. Soon after another attack was made by ten floating batteries, built by the Spaniards at an enormous expense ; but by an incessant fire of red-hot balls from the besieged, most of them were set in flames ; when Captain Curtis, with two English gun-boats, advanced, and prevented their receiving any assistance from the Spanish fleet. The humanity of Captain Curtis saved 357 of the enemy. Great numbers, however, must have been killed and blown up. Fresh supplies were soon after thrown into Gibraltar by Lord Howe, who had a partial engagement with the combined fleets, off the mouth of the Straits.

A complete change now took place in the ministry, at the head of which the Marquis of Rockingham was placed ; overtures were made for a general pacification ; some indulgences were granted to Ireland ; several useless places were abolished ; and some fruitless attempts were made for a more equal representation in parliament. On the death of the Marquis of Rockingham, Lord Shelburne (now Marquis of Lansdown) took the lead in administration, and several resignations followed. This year the *Royal George*, of 100 guns, was unfortunately upset, when the brave Admiral *Kempenselt*, and nearly 600 other persons, were drowned in her.

In 1783 the provisional articles between England and America were made public. By these it appeared, that his Britannic majesty acknowledged the independence of the United States of New Hampshire, Massachusetts Bay, Rhode Island and Providence Plantations, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, the Carolinas, and Georgia. He also relinquished all claims to the government of them, and consented to treat with those people as free and independent states, who but a little time before were despised as unpardonable rebels. Their boundaries were also settled, and they were allowed the liberty of fishing, and drying fish as usual. It was agreed that the creditors on both sides should meet with no impediment in the prosecution of their claims. The restoration of confiscated property was also *recommended*; all prisoners were to be set at liberty; the English troops were to be immediately withdrawn from America; and a firm and perpetual peace was concluded between the contracting parties.

In our treaty with the French, after settling the fisheries, the islands of St. Pierre, St. Lucia, Tobago, and Goree, were surrendered to France, with the river Senegal and its dependencies, and the fort of St. Louis and others. The islands of Grenada, the Grenadines, St. Vincent, Dominica, St. Kitt's, Nevis, and Montserrat, were left to the English; the islands which the English had taken from the French in the East Indies were restored; and the prisoners on both sides were to be surrendered without ransom.

With the Dutch our negotiations were not so easily settled. However, after much deliberation, and several memorials, it was stipulated by treaty, that the King of Great Britain should restore Trincomalee, and all the possessions that had been taken during the war, to the Dutch; and that the States General should guarantee Negapatam, with its dependencies, to his Britannic majesty; and that mutual conquests were to be given up without compensation.

Our treaty with the Spaniards determined, that his Catholic Majesty should maintain Minorca and West Florida, and to have East Florida ceded to him; and that Spain should surrender the island of Providence and the Bahamas to the English. All other conquests of territories were mutually to be restored without compensation.

At home the preliminary articles of peace were canvassed with great freedom in both houses of parliament.

Some important motions were carried against the ministry in the House of Commons; and after various and ineffectual

struggles, the Earl of Shelburne and his party resigned, and the Duke of Portland was placed at the head of the new administration, while Mr. Fox took the lead in the lower house. Mr. Pitt, the son of the great Earl of Chatham, made a motion for a parliamentary reform, which did not succeed ; and soon after the ministry were suddenly dismissed, and Mr. Pitt was announced First Lord of the Treasury.

In the year 1778 the Empress of Russia, who wished to obtain a port in the Black sea, made very heavy claims on the Turks, and prevailed on the Emperor of Germany to join in her views ; but the war did no honour to the emperor, as the Turks cut some thousands of his troops to pieces, and many more perished by fatigue, want, and disease.

The Empress of Russia, however, was more fortunate ; she defeated the Turks in every battle, and took from them several places, particularly the forts Ockzacow and Ismael. These successes alarmed the British court, who fitted out a large fleet, in order to prevent Russia's obtaining the navigation of the Black Sea ; but the empress seemed to ridicule the preparations England was making, and insisted on maintaining the advantages she had acquired. Negotiations commenced ; but the court of London, finding the empress was not to be intimidated, at last consented to disarm their navy, which had occasioned the nation an enormous expense, and leave the Russians in possession of their conquests. In or about the month of August, 1791, the preliminaries of peace were signed between the Russians and the Turks, by which the empress obtained the free navigation of the Black Sea, with the full possession of Ockzacow, and all its appendages, from the Neister to the Bog.

In 1788 the King of England was seized with a violent disorder, and continued ill a long time, with very little hopes of recovery.

In December the parliament met, but could not proceed to business, as they consisted only of two branches of the legislature, the third, the king, being incapable of acting. The Prince of Wales was proposed as regent during his majesty's indisposition ; but the power with which he was to be invested occasioned very violent debates in both houses.

This contest continued till March 10, 1789, when his majesty sent a message to the house, to acquaint them with his sudden recovery, and his ability to attend to the public business of the nation

In the month of July one of the most unexpected revolutions took place in France that ever happened in the political hemisphere of Europe. The French king was divested of all his absolute authority, and reduced to one of the most limited monarchs in Europe. The Bastile, that den of slavery and cruelty, was so effectually demolished by the populace, as literally not to leave one stone upon another. The national assembly, who were chosen by the people, took from the king the power of making war and peace, and abolished all titles of peerages, it being their opinion, that no distinctions should be known but such as arise from virtue, genius, and merit.

On the 14th of July, 1790, a solemn festival was held at Paris, when the French monarch made a formal surrender of that power which is dangerous in the hands of any single man. On the same day, in the Field of Mars, he took a solemn oath to abide by the new constitution, as prescribed by a decree of the national assembly. However, he soon afterwards endeavoured to make his escape to the German dominions, but was stopped on the borders of Flanders, brought back to Paris, and closely guarded in one of the royal palaces. In the mean time the national assembly drew up a new code of laws, and presented them to the king to sign, which he did on September 14, 1791, and by that means allayed the popular tumults.

In the East Indies, Lord Cornwallis, having in a war with Tippoo Saib reduced him to extreme distress, concluded a peace upon his own terms, and received Tippoo's two sons as hostages for his fulfilment of them.

Mr. Fox introduced a bill for ascertaining the rights of juries in matters of libel, by the passing of which it was decided, contrary to the opinion of the law lords, that juries are judges both of the law and the fact.

The spirit of discussion, excited by the revolutionary proceedings in France, having produced various publications of seditious tendency, a royal proclamation was issued to suppress it, and prosecutions were instituted against the authors of several books. On this occasion his majesty received addresses of loyalty from both houses of parliament, as well as from the public bodies throughout the kingdom.

- Associations were formed for opposing the principles of "republicans and levellers:" loyal addresses were presented, and writings continually dispersed against the French and their abettors. In parliament, too, an act passed to enable

his majesty to force foreigners out of the kingdom, and another to prevent the exportation of corn into France.

The French complained of these two measures loudly, as infractions of the commercial treaty subsisting between the two nations, not choosing to consider them as had recourse to in consequence of their own recent offensive conduct. In particular, they had publicly resolved to extend their *fraternity* and assistance to the revolting subjects of all monarchic^{al}, or, as the convention chose to call them, tyrannical governments; and they had determined to open the navigation of the Scheldt, notwithstanding they knew this country was bound to oppose it. These were points of which the British ministry could not but demand the disavowal; but this not being complied with to their satisfaction, M. Chauvelin, ambassador from the late king, but not acknowledged in that light from the republic, was ordered to quit the kingdom, by virtue of the alien act.

The 10th of August was rendered famous to the utmost verge of the politically intelligent world, as the epoch of the downfall of the ancient monarchy of France, by a furious attack made on the palace of the Tuilleries at Paris, wherein the few who loyally maintained their stations in defence of the royal family, chiefly the Swiss guards, were overcome and murdered, and the royal family forced to take refuge in the national assembly. The king was soon afterwards formally deposed, and imprisoned with his family in the Temple.

The 2nd of September was rendered, if possible, still more notorious than the 10th of August, by a frantic mob's breaking open the prisons in Paris, and murdering such unhappy persons confined therein as had, by their avowed or imputed loyal sentiments, exposed themselves to the effects of their malice. The innocent Princess de Lamballe was one who fell under their infernal vengeance. Her head was carried about the streets upon a pole.

In the beginning of the year 1793 the world was awfully impressed by one of those events which are not often found in the annals of civilized nations, the putting a sovereign to death. Louis XVI. of France, after a trial which terminated in sentencing him to lose his life, was guillotined on the 21st of January.

Again, in October, the public feelings were most sensibly affected by the trial of the Queen of France on the 14th, and her execution on the 16th of that month.

On the 6th of November was also executed the Duke of Orleans, cousin to the late King of France; but his conduct when living had left nothing in remembrance to cause any one to regret his death. The famous Countess du Barre, formerly mistress of Louis XV. made another of the multitude of sufferers.

A declaration of war on the part of the French republic had taken place against the King of Great Britain, and the Stadtholder of the United Provinces.

Great Britain, without making any formal declaration of war, soon entered into the active scenes of it, joining a confederacy formed between Germany and Prussia, and sending troops to the continent under the command of the Duke of York. The combined armies defeated the French generals Valence, Miranda, and Dumourier, and took the cities of Valenciennes and Conde. The Duke of York proceeded to attack Dunkirk, but this design he was compelled to abandon with loss.

Spain having also joined the coalition, a fleet of ships from that country, and an English fleet under Lord Hood, proceeded to Toulon, which, by consent of the inhabitants, they took possession of in the name of Louis XVII. and garrisoned with eighteen thousand men of different nations. Not long afterwards, however, that city being powerfully attacked on the land side, and the allies being unable to maintain their station, set fire to the stores and shipping of the enemy which could not be carried off, and retired with a considerable number of royalists.

In 1794, an alarm having been spread in the nation from the apprehension of an invasion with which it was menaced by the French, great exertions were made by government to put the kingdom into a due state of defence, and military associations were lawfully organized in all parts for that purpose. These associations became very popular, and doubtless, from the readiness of young men to enter into them, had a sensible effect on the enemy, whose mighty preparations soon afterwards began to slacken, and at last were entirely dropped.

By virtue of warrants from the secretary of state, several seditious societies were suppressed, and their papers seized; these affording strong grounds to charge some leading and active men amongst them with high treason, they were accordingly apprehended and brought to the bar, but eventually acquitted. Amongst them were Mr. Horne Tooke, Mr. Hardy, and Mr. Thelwall.

At this time the war on the continent proved very disastrous to the combined armies; nevertheless, the spirits of the English were superlatively elated by a glorious naval victory, obtained by the gallant veteran Lord Howe, over a French fleet, which had ventured out of Brest harbour for the purpose of sheltering a convoy of expected merchantmen. A partial action took place on the 28th of May; but a general one ensued on the 1st of June. After very hard fighting on both sides, the French fleet was totally defeated, with the loss of six ships of the line taken and three sunk. From the crippled state of the English fleet, however, the merchantmen got safe into port. The French fleet consisted of twenty-six, the English of twenty-five ships of the line.

In the West Indies, too, we were successful, taking Martinico, St. Lucia, and Guadaloupe; and no less in the East, where the capture of Pondicherry, Chandinagore, and Mahie, added fresh lusture to the British arms.

After the evacuation of Toulon, Lord Hood besieged and took the island of Corsica, the crown of which was afterwards presented to his majesty, who for some time governed the island by a viceroy; but both that and the crown have been since relinquished.

The innocent Madame Elizabeth, sister to the late King of France, was guillotined at Paris on the 10th of May; and on the 28th of July the tyranny of Robespierre met its deserved fate at Paris, by his being overthrown and guillotined with twenty of his infamous adherents.

In 1795, from the misfortunes which had attended the allied armies in the preceding campaign, and during the uncommonly severe winter which followed, and which afforded singular advantages to the French, not only the Austrian Netherlands, but the Dutch territories also being overrun by them, the stadtholder and his family were obliged to seek refuge in this country, and landed at Harwich the 21st of January. Hampton Court was assigned for their residence.

Our superiority at sea, however, continued to be maintained by another victory on that element, which was obtained by Lord Bridport, close in with L'Orient; when, after an engagement of three hours, three French line of battle ships were captured, the *Alexander*, *Formidable*, and *Tiger*. Had there been a little more sea-room between the French fleet and their coast, no doubt the fruits would have been still more valuable.

There being from the present situation of affairs every reason to apprehend a rupture with the Dutch, an embargo was, on the 24th of January, laid upon the shipping and property of that nation, in the port of London, to the amount of £200,000 sterling.

In December, for the first time this war, a royal message of a pacific nature was delivered in both houses of parliament, purporting that the government of France having assumed somewhat of a regular form, his majesty was now ready to listen to any disposition to negotiate on the part of the enemy; and to conclude a treaty of general peace, whenever it could be effected on just and suitable terms for himself and his allies.

An overture was accordingly made on the part of his majesty, but so captiously, if not insolently treated by the rulers in France, that his majesty could not with honour take farther steps towards the attainment of the desirable object in view.

In 1796 the Seven United Provinces, being now become a republic upon the French model, and an ally of France, became also exposed to hostilities from this country, and in consequence lost several of their colonies and much of their shipping. Our arms were also turned against Spain, which had been constrained by France to withdraw from our alliance, and declare war against us.

In the mean time the French, without the least colour or pretence of right, prosecuted a most successful campaign in Italy, under Buonaparte, a young man of extraordinary talents, whose character, from the various scenes and transactions in which he has since been engaged, may now be pretty accurately appreciated.

In the West Indies the island of St. Lucia was taken by Sir Ralph Abercromby, on the 25th of May. On the 16th of July, Captain Trollope, in the *Glatton*, of 54 guns, acquired great eclat by engaging and beating off a French squadron of eight ships, namely, one of 50 guns, two of 36, three of 28, one of 18, and one of 12. The British navy also acquired fresh strength and laurels by Admiral Elphinstone's capturing, on the 16th of August, a large Dutch fleet, under the command of Admiral Lucas, near the Cape of Good Hope, without firing a gun. The Dutch Spice Islands also surrendered to the forces sent against them.

A memorable event took place in America, on the 17th of August, by General Washington's resigning the presidency of that country. Mr Adams was his successor.

On the 18th of October the Spaniards declared war against England; and the 17th of November was marked by the death of the Empress of Russia, who was succeeded by the Grand Duke Paul Petrowitz.

The patriotism as well as opulence of this country were evinced to the world December 5, by a loan of £18,000,000 being raised for government by voluntary subscriptions in 15 hours and 20 minutes.

Towards the end of this year another attempt was made to negotiate a peace, for which purpose Lord Malmesbury was delegated to Paris; but, after a considerable length of time spent in fruitless discussion, he was informed that his proposals could not be listened to, and that he must leave Paris in eight and forty hours.

On the 14th of February a signal victory was obtained off Cape St. Vincent, by Sir John Jervis, commanding fifteen sail of the line, over the Spanish fleet of twenty-seven. After an engagement of five hours, in which the vast superiority of British naval tactics, skill, and bravery, was amply displayed, he captured two ships of 112 guns, one of 84, and one of 74. As a reward for this eminent service, Sir John was created a peer, by the title of Earl St. Vincent, in allusion to the scene of action.

On the 14th of October Admiral Duncan, who had been waiting all the summer off the Texel for the Dutch fleet, had an opportunity of coming to an engagement, close to their own coast, and, after a most obstinate combat, captured no less than nine of their largest ships, and two admirals. For this great achievement the gallant admiral was raised to the peerage, with the dignity of viscount.

Three such transcendantly glorious victories as we have recorded under Howe, Jervis, and Duncan, were all followed by the appointment of a day of solemn and general thanksgiving to the Great Disposer of events for the same; and their majesties, together with the members of both houses of parliament, attended its celebration in St. Paul's Cathedral.

A third negotiation for peace was now set on foot at Lisle, but great obstacles presented themselves; and after the conferences had been protracted till September, Lord Malmesbury, finding it totally useless to continue them longer, returned to England.

On the 17th of February the island of Trinidad was taken together with four ships of war in the bay; and on the 22nd of the same month fifteen hundred French ragamuffins

troops having been put on shore at Fishguard, in South Wales, and abandoned by their countrymen, were all made prisoners.

For a long time past, discontent had been rankling in the bosom of great numbers of the Irish, who, styling themselves "United Irishmen," had formed a very extensive conspiracy against the government. . . Numerous and shocking barbarities were committed upon those unhappy persons whom they conceived to be their enemies ; but, their operations were chiefly confined at first to the night. However, they at length dared to appear in force, and committed acts of open violence and rebellion ; insomuch, that on the 30th of March the Lord Lieutenant (Lord Camden) found it necessary to issue a proclamation, in which the most direct and positive orders were given to the officers commanding his majesty's forces, "to employ them with the utmost vigour and decision for the immediate suppression thereof, and also to recover the arms which had been traitorously forced from his majesty's peaceable and loyal subjects, and to disarm the rebels and all persons disaffected to his majesty's government by the most summary and effectual measures." The loyal inhabitants were also required to aid and assist the military in carrying the proclamation into effect. General Abercromby was then at the head of the army in Ireland, and he caused general notice to be circulated throughout the kingdom of the orders contained in the above-mentioned proclamation, and demanded a restitution and surrender of all the arms either taken or concealed, within ten days from the 3rd of April, the persons so surrendering them being assured of suffering no kind of violence ; but on the contrary, those who should withhold or conceal the said arms, would have the troops "quartered in large bodies, to live at free quarters among them," besides experiencing other very severe measures which would be resorted to, in order to enforce obedience.

These measures were attended with considerable success, but by no means sufficient to prevent the growth of the conspiracy ; for on the 22nd of May the Lord Lieutenant sent a message to both houses of parliament, acquainting them, that the magistrates of Dublin had made application to him to "place the city under the provisions of the act passed in the 36th year of his majesty's reign ;" which he had complied with ; and farther, that the disaffected had been daring enough "to form a plan for the purpose of possess-

ing themselves, in the course of the present week, of the metropolis, of seizing the seat of government, and those in authority in the city." His excellency hoped, however, to be able to prevent the accomplishment of those outrageous designs.

Two days before this communication to parliament Lord Edward Fitzgerald was apprehended at the house of one Murphy, a feather merchant, in Thomas Street. Thither Mr. Alderman Swan, Major Sirr, town major, and Captain Ryan, repaired in three coaches as privately as possible. They entered his room separately, by which means he had the opportunity of doing much mischief before he could be subdued. With a most destructive instrument, of a new and curious construction, he ran Mr. Swan through the body above the shoulder blade, and with one cut opened the belly of Captain Ryan to such a degree that his bowels fell out. He was making another desperate effort at Major Sirr, when he received from him a pistol shot in the shoulder, and was forced to yield. After examination at the castle he was conveyed to Newgate.

In the perturbed and dangerous state the kingdom of Ireland now was, the British government judged it prudent to set at the head of it a military man of tried integrity and abilities; and perhaps a fitter person could not have been found than the Marquis Cornwallis, who was appointed Lord Lieutenant, and arrived at Dublin on the 20th of June. In the mean time however, his predecessor, Lord Camden, had so successfully exerted himself, that the rebels were discomfited in all parts, and driven from their strong holds, particularly from Vinegar Hill, where they had assembled in great numbers.

The Marquis Cornwallis seems to have approved of the plan of operations adopted by the military; they continued to pursue it steadily and vigorously, and with their accustomed success. Nevertheless, on the 27th of June, the marquis published a proclamation, offering his majesty's pardon to all such insurgents as should, within fourteen days, surrender themselves and their arms, and forsake their leaders who had seduced them.

What with the effect of the proclamation and the destruction of the sword and halberd, it was calculated that 25,000 human beings had lost their lives, some of them of high consideration. The rebellion was now generally suppressed: armed parties at times made their appearance in

different quarters, and kept the military employed in scouring the country; but none of sufficient consequence to create any serious alarm.

On the 22nd of August, a secret committee of the House of Commons made a report, in which were developed the rise, progress, and objects of the insurgents in the late rebellion. It took its origin in 1791. In 1796 there were 100,000 "United Irishmen," armed with pikes, in the province of Ulster alone; but being disconcerted by the measures taken against them, they adopted the plan of corrupting the other provinces.

In the evening of the same day three French frigates appeared in the Bay of Killala, and landed about 700 men, who immediately took possession of the town of Killala, and made a small party of the Prince of Wales's fencible regiment prisoners. They established their head quarters at the castle, which was the residence of the bishop. They demeaned themselves much better than might have been expected; nay, proved themselves protectors of the bishop's family against the violence of the rebels: and the bishop's capability of speaking French was highly serviceable to both parties on the occasion.

This small body lost no time in advancing into the country, and on the 27th attacked General Lake at Castlebar, before his forces were collected, and compelled him to retire with the loss of six pieces of cannon.

Encouraged by this success, the French ventured to make farther progress; but finding that General Lake had received considerable reinforcements, and that Marquis Cornwallis himself was advancing against them with a large body of troops, they thought it most advisable to make a retrograde movement, which they continued to do, varying their route in order to avoid their pursuers; till the 8th of September, when they were overtaken by General Lake's column. An action forthwith commenced, which, after half an hour's contest, terminated in the surrender of the whole French corps, together with the Irish rebels who had joined them, but who were not very numerous.

Report had made it well known throughout Europe, that great preparations were making by the French at Toulon, for an expedition of more than common magnitude and importance, and that it was to be conducted by the celebrated Bonaparte; but its destination was involved in impenetrable secrecy. The British commanders in the Mediterranean were not wanting in their attention to them.

motions of the fleet on board which it was preparing, hoping to intercept it on its putting to sea. It escaped all their vigilance, however, and Malta was captured almost before the course it had taken was known. From thence it steered towards Alexandria, in Egypt, and anchoring off Rosetta, situate at one of the mouths of the Nile, debarked unmolested the forces it had carried. Admiral Nelson, who was the person appointed to look after it, employed every means in his power to obtain a knowledge of its situation: but it happened, nevertheless, that he did not get a sight of it for a considerable time. At length, however, on the 1st of August, he found the French fleet moored in a strong line across the Bay of Aboukir, in a position which the French admiral thought to be perfectly secure. Admiral Nelson ordered an immediate attack, and by dexterously sending a part of his ships (one of which grounded in the attempt) between the enemy's fleet and the shore, attacked it on both sides at once, ship after ship, in succession. A complete victory was the consequence; after a most dreadful conflict, nine ships of the line were taken, and two burnt, one of which was *L'Orient*, the French admiral's, who was killed in the engagement. Only two ships of the line escaped of the whole fleet. For this most glorious service Admiral Nelson was rewarded by an advancement to the peerage, with the title of Baron Nelson of the Nile, and a pension of £2000 per annum.

On the 22nd of January, 1799, the measure for uniting the kingdoms of Great Britain and Ireland was proposed to the British parliament by a message from the king, in which his majesty expressed his firm persuasion, "that the unremitting industry with which our enemies persevere in their avowed design of effecting the separation of Ireland from this kingdom, cannot fail to engage the particular attention of parliament; and his majesty recommends it to both houses to consider of the most effectual means of counteracting and finally defeating this design." &c. The same measure was proposed on the same day by his excellency the Lord Lieutenant to the Irish parliament. In both parliaments the greatest opposition was made to it, on the question for the address; but with very different results. It was carried in both houses of the British without a division; it was also carried in the Irish House of Lords by a majority of 32; but negatived in the Commons by a majority of five. The measure was therefore rejected in Ireland for that session. But in England Mr. Pitt followed

up its success, in spite of the most determined opposition, till he had obtained the passing through both houses a number of resolutions, explaining the nature, extent, terms, &c. of his scheme, in order that the Irish might take them into consideration in their calm hours; after which, possibly, they might find themselves inclined to think more favourably of and adopt them.

A fresh war having broke out in the East Indies, in consequence of the perfidious and treacherous conduct of Tippoo Sultan, Lieutenant-general Harris, at the head of an army collected on the occasion, on the 4th of May attacked and captured Seringapatam, his capital. The sultan himself was slain in the conflict; immense treasures were found in his palace; and the acquisition of a great extent of country, the delivery of the British possessions in India from the peril of foreign invasion, and their security and ease, were the consequence of this victory.

Vast preparations had long been making for a grand expedition against Holland, and on the 7th of August the first division of troops began to embark at Ramsgate, Deal, Margate, &c. under the command of Sir Ralph Abercrombie. On the 13th the fleet sailed, and landed the troops on the 27th on the sands near the Helder Point, and after a battle which lasted the whole day, defeated the Dutch and French, who abandoned in the night all the batteries of the Helder Point. Hereupon General Abercrombie proceeded farther into the country, taking due care, however, to secure himself by fortifications and intrenchments; and on the 10th of September the Dutch and French armies attacked the British, but were defeated at Schagenburg, with the loss of 1000 men, besides prisoners. The British lost about 200.

A second and a third division of British troops had sailed for Holland, the last of which, with a corps of Russians, arrived at the Helder on the 15th: The Duke of York had arrived there the day before. The whole effective force under his command was estimated to amount to 60,000 men.

On the 19th the British and Russians, under the command of the Duke of York, attacked in three columns the Dutch and French armies, and got possession of Horne in Dyke and of Alkmaar, but the Russian column being defeated, the whole army returned to its former position. The British lost 1000 in killed, wounded, and prisoners: the Russians 2000. On the 3rd of October, the Duke of York

attacked and drove the French and Dutch army from all their positions before Alkmaar, which opened its gates to the British the next morning. The British lost in killed, wounded, and missing, 1332, the Russians 593. On the 6th the Duke of York again attacked the enemy between Bever Wyke and Wyck-up-zee, and after a severe battle compelled them to retire from the field. The British took 500 prisoners, but had 92 officers and men killed, 725 wounded, and 613 missing; the Russians 382 killed or prisoners, and 735 wounded. The Duke of York, having learnt that the enemy had been reinforced with 6000 men, held a council of war, in which it was deemed necessary to withdraw the troops from Holland, to abandon Alkmaar, and retire to the position first occupied by General Abercrombie, on the canal of Zype. On the 8th his royal highness concluded a convention with the French General Brune, by which it was agreed, that the British army should have to the 30th of November to evacuate Holland, on condition of returning 8000 French and Dutch prisoners, and not damaging the country or works in their possession at the Helder. In consequence of this convention the army prepared to return to England; the Duke of York arrived in town the 4th of November, and by the 20th the Helder was finally evacuated, the whole of the British and Russian army having been re-embarked.

The command of the naval operations in this expedition was committed to Admiral Mitchel, who, after the success of the troops at the Helder, followed the flying Dutch fleet, and on the 28th and 30th took the whole of them, consisting of one of 74 guns, four of 68, one of 60, three of 54, six of 44, one of 32, six of 24, and one of 16. On the 21st of September he also captured Enkhuysen, and other towns on the Zuyder Zee.

The question of the union between Great Britain and Ireland was revived in January, 1800, and, notwithstanding the vigorous exertions of its opponents, its importance and utility were so powerfully insisted on by his majesty's ministers, that it was at length ratified by the parliaments of both kingdoms, and passed into a law by royal assent on the 2nd of July.

In the month of February two acts of considerable importance were passed, the one for a suspension of the habeas corpus act, the other for preventing mutiny and sedition. The first of these also prudently turned an attention

PART VII. *or Youth's Instructor.*

toward the enormous price of provisions, which had resulted partly from the waste of war, and partly from a scanty harvest; and several laudable institutions were made for the relief of the poor in that distressing exigency; but our confined limits preclude the possibility of descending to particulars.

During these transactions at home a squadron under Sir Edward Pellew destroyed the forts on the south-west of the peninsula of Quiberon; captured six brigs, sloops, and gun-boats; and intercepted the supplies which had been destined for the use of the French fleet off Brest. Sir Charles Hamilton also took possession of the isle of Goree, on the coast of Africa; and a fleet under the command of Sir John Borlase Warren gained some advantages over the Spaniards at Ferrol.

On the 15th of September the island of Malta surrendered to the British troops, after a blockade of two years; and about the same time Curaçoa, an island situate near the continent of South America, was surrendered by the Dutch to the English. On the 5th of October the British fleet from the Mediterranean appeared before Cadiz; but as the place was then infected by an epidemic disease, and the strength of the works was found to be very great, the armament was withdrawn.

In consequence of various petitions from the city of London, and other parts of England, the parliament was convened on the 11th of November, and an address of thanks was moved for his majesty's gracious speech on that occasion.

After several parliamentary debates and proceedings, relative to the dearth of provisions, the evacuation of Egypt, and the dismissal of his majesty's ministers, the king gave his sanction, on the 31st of December, to such bills as were deemed necessary to be passed; and (as the first day of the new year was to usher in a new form and title of government) the chancellor was ordered to read a proclamation, which declared that the individuals who composed the present parliament should be the members, on the part of Britain, of the parliament of the united kingdom of Great Britain and Ireland, and that the imperial parliament should be assembled on the 22nd day of the ensuing century.

In the beginning of February the situation of England might be said to have become truly critical, being literally encompassed with difficulties and dangers. Repeated efforts to circumscribe the power of France had been

rendered ineffectual; the southern and western nations of Europe were either detached from, or rendered hostile to the interests of our country; the ports of the Weser, Elbe, and Baltic, were unfortunately shut against us, while we expected a supply of grain from thence; and the indisposition of the king rendered it impossible for retiring ministers to deliver up the badges of their offices.

In this posture of affairs Mr. Pitt determined to resign his offices of First Lord of the Treasury, and Chancellor of the Exchequer; and the resignation of that gentleman was followed by those of Mr. Dundas, Earl Spencer, Lord Grenville, and Mr. Windham. Various debates arose in the House of Commons in consequence of this circumstance: but as our limits preclude the possibility of detailing them, it is only requisite to add, that Mr. Addington (late Speaker of the House) succeeded Mr. Pitt as Chancellor of the Exchequer; and an entire change took place in the administration.

The 25th of March was marked by the death of Paul I. Emperor of all the Russias; who appears to have disgusted all ranks of his subjects, and is said to have been taken off by violence, though his dissolution was publicly ascribed to an apoplexy.

In the morning of April 2, Lord Nelson engaged the Danish fleet, consisting of six sail of the line, eleven floating batteries, and one bomb-ship, besides several schooner gun-vessels, near Copenhagen, and gained a decisive victory, after an obstinate and bloody conflict of four hours. In consequence of this circumstance the thanks of the Commons were unanimously voted to Admiral Sir Hyde Parker, Vice-admiral Lord Nelson, Rear-admiral Graves, and Colonel Stewart, for their bravery and gallant conduct. Monuments were also ordered to be erected at the public expense to the memory of Captain James Robert Mosse, and Captain Edward Riou, who fell gloriously in the discharge of their duty; and a liberal pension was conferred by the king on Captain Sir Thomas B. Thompson.

On the accession of Alexander to the imperial throne of Russia, harmony was re-established between the courts of London and Petersburg; and the termination of hostilities between Denmark and Great Britain was attended with such affecting circumstances as might be naturally expected reconciliation of friends.

Whilst the British arms were crowned with abundant success in various undertakings, the parliament passed se-

veral bills of a *beneficial nature*, particularly those for bounties on the importation of grain; improvement of commons and waste lands; repeal of the brown bread act; relief of insolvent debtors; and for preventing the arrest of aliens in Great Britain for debts contracted in France previously to the revolution. We must also observe, that his majesty graciously conferred the dignity of a barony of Great Britain on the relict of Sir Ralph Abercromby, who terminated a life of gallant service at Aboukir, and to whom a monument was justly decreed at the public expense.

About this time the naval strength of England was so great, that she had fleets in the Indian Ocean, in the Red Sea, at the mouth of the Nile, in the Mediterranean, in the Baltic, and in the West Indies; besides a Channel fleet, detached cruizers, and convoy ships in every direction; and a flotilla of vessels which, under the command of Lord Nelson, protected the British shores, and gave frequent causes of alarm to those of France. Of the various engagements which happened in the course of the summer, it is only necessary to say, that they generally reflected the highest honour on the cause and arms of the British empire.

England having been for some time threatened with an invasion by means of flat-bottomed boats, it was deemed expedient to turn the tide of war from defensive to offensive, and, after mature deliberation, it was determined that Lord Nelson, with a flotilla of gun-boats, and other armed vessels, should carry the terrors of war to the enemy's shore.

On the 30th of July Lord Nelson displayed his flag on board the *Leyden*, of 68 guns, at Deal, and took the command of an armament which had excited universal curiosity and attention, as being destined for a secret expedition. On the 1st of August the gallant commander stood over to the coast of France, and avowed his intention of making an attack upon Boulogne, where the enemy had been assembling their small craft, as was reported, for the purpose of a descent upon this country.

After reconnoitring the fortifications, and making other necessary arrangements, his lordship commenced the attack at day-break on the 4th instant, and a heavy firing ensued, by which six of the French vessels were so much damaged, that they were towed from the scene of action. It was the British admiral's intention to have sent, at the approach of night, three bombs close upon the enemy, each bomb followed by ten boats; but a sudden change of the

wind precluded the execution of this scheme, and the English vessels were obliged to haul off, after convincing the French, that they should not come out of their harbour with impunity.

Having received a considerable reinforcement from the Downs, and made a feint of sailing towards Flushing, or some other port on the Dutch coast, Lord Nelson resolved to attempt the destruction or capture of the whole flotilla, amounting to twenty-five armed vessels, which were moored in the front of Boulogne. Accordingly on the evening of the 15th our vessels formed in four divisions, to storm the adverse line of brigs, boats, and luggers, which were fastened to each other by means of strong iron chains, and defended by land batteries, as well as by musketry from the shore. Each of the English divisions had a proportionate number of vessels to attack; the first beginning to the eastward, and proceeding in order to the westward. The boats put off from the Medusa at half past eleven at night, and a vigorous attempt was made to board a large brig, that was distinguished by the commodore's pennant: but the gallant exertions of the assailants were completely baffled by some strong netting that was braced to the lower yard, and by an instantaneous discharge of guns from about 200 soldiers. By this accident Captain Parker was dreadfully wounded; his companions were all killed or disabled, and his boat hung alongside; in which situation it would have certainly been taken by the enemy, had not the Honourable Mr. Cathcart taken it in tow, and carried it off.

Captain Williams led on his subdivision with extraordinary bravery, and made himself master of one lugger, notwithstanding most of his boat's crew were killed in the dreadful contest. Captains Conn, Jones, and Cotgrave, also exhibited the utmost firmness and resolution in their respective attacks: but the British troops were assailed by such volleys of musketry and grape shot, both from gunboats and from the shore, and their attempts were so effectually foiled by the boarding netting, projecting spikes, and extended chains, that our gallant admiral was at length compelled to abandon his enterprise, with the loss of 172 men. The loss of the French is not accurately known, though it must have been very considerable. The Admiral Latouche Treville acknowledged that our sailors and marines boarded his vessels with the utmost intrepidity, and described the deplorable spectacle that was presented on board their ves-

sels after the action—the decks literally strewed with dead and dying, and mutilated limbs every where discovered, after the ensanguined corpses were thrown into the sea.

These tremendous engagements, in which the discharge of so much artillery seemed to shake both heaven and earth, were distinctly heard on both sides the Channel; and the first during the 3rd of August was witnessed by thousands of spectators, who covered the hills of Boulogne and the cliffs of Dover. This was perhaps the first spectacle of so important a nature that was ever seen from the shores of both countries.

On his arrival at Deal, Lord Nelson exerted himself in a very laudable manner for the relief of the brave combatants, who had suffered severely in this unfortunate expedition. His time was chiefly occupied in visiting the wounded in the hospital, and his cordial sympathy afforded a sensible consolation to most of the sufferers. On asking one man how he was, and hearing he had lost an arm, he told him not to regard it, for that he himself had lost one also, and might soon lose a leg; but that they could never be lost in a better cause than that of defending his country. This observation produced the desired effect; and many of the mangled veterans exclaimed in the enthusiasm of loyalty, that they only regretted their wounds as they prevented them from accompanying so brave a commander in another expedition.

The failure of his most brilliant project in Egypt, the sudden death of Paul I. the dissolution of the northern confederacy, the unabated vigour of the British government, and several concurring circumstances, now induced the Corsican consul to listen to pacific proposals. Preliminaries of peace were accordingly signed at Lord Hawkesbury's office on the 1st of October, and the ratification was brought to London on the 12th, by M. Lauriston.

On the 29th of March, 1802, Mr. Moore (assistant secretary to Marquis Cornwallis) arrived in London with the definitive treaty, which had been signed at Amiens, on the 27th, by the plenipotentiary of his Britannic majesty, and by the plenipotentiaries of France, Spain, and the Batavian republic; and on the 29th of April, the proclamation of peace was performed at the usual places in London and Westminster.

The blessings of peace, however, were of short duration, owing to the perfidy and unbounded ambition of the French government; which imposed the most severe re-

strictions upon British commerce, and refused to restore some vessels captured in India after the signature of the preliminaries. At the same time the navies of Spain and Holland were held at the disposal of the First Consul; numerous persons were landed in different parts of Great Britain and Ireland under the name of commercial commissioners, but who were in reality military officers, authorized to procure surveys of certain places; and the report of Colonel Sebastian's mission to Egypt contained the most malignant calumnies against the British officers who commanded in that quarter.

Some official papers presented to the British ministry, arraiguing the liberty of the press in England, and demanding that the French princes, and other emigrants, should be dismissed from the protection of his Britannic majesty, afforded just ground for a suspicion that Buonaparte wished to interfere and gain an ascendancy in our domestic concerns, as he had previously done with respect to Holland, Spain, and other countries. And the annexation to France of the territories of Piedmont, Parma, Placentia, and the isle of Elba; together with the subjugation of the Swiss Cantons, in direct violation of the treaty of Luneville, exhibited in striking colours the insatiable rapacity of the French government.

Under these circumstances the possession of Malta became a subject of contention, and a peremptory demand was made for its immediate evacuation, while the British ministry were insolently told, in an official document, that their country was unable to contend *single handed* with France.

At this crisis very considerable preparations were made in the ports of France and Holland, which excited the attention of the English ministry, and induced his majesty, on the 8th of March, 1803, to make a communication on the subject to both houses of parliament; and two days afterwards a second message imported the necessity of calling out and embodying the militia, or such part thereof as his majesty might think proper for the defence and safety of his dominions.

A long and protracted correspondence had been carried on between the courts of Paris and London relative to the dispute respecting Malta, the emigrant princes, &c. But after much time had been exhausted, and an interview had taken place between Lord Whitworth and the Chief Consul, in which the latter displayed a surprising neglect of

dignity and propriety, the British ambassador set out on his return: and on the 18th of May, government published a declaration of their cause of complaint against France; which was soon followed by the issuing of letters of marque and reprisal.

Such was the general abhorrence of the French perfidy, and such the contempt of their threatened invasion, that, instead of repining at the short interval of peace, and the unfortunate necessity for a recommencement of hostilities, the heroism of the English nation seconded the vigour of government so effectually, that our naval force was soon found to be double in number and spirit to what we could boast at the beginning of any former war. The embodying of the militia was followed by the act for raising an army of reserve, which, in the course of a few months, added thirty thousand men to the regular force of the country; and an act enabling his majesty to raise a *levy en masse*, was rendered unnecessary by the spontaneous zeal and loyalty of the people. Volunteer associations were formed in all parts of the country; ample subscriptions were raised in many of the principal towns; and, in short, the British public seemed to glory in the idea of offering their persons and property in defence of their enviable constitution: so that when our enemy thought to have snared the lion sleeping in his den, he found him prepared for battle, and ready to spring upon his prey.

On the opposite side of the Channel immense preparations were made, particularly at Boulogne, the harbour of which was strongly fortified. An army of three hundred thousand men was also marched to the coast, and vessels of a particular description were constructed in all the ports and navigable rivers of France and the Netherlands.

Finding, however, that England enjoyed the most perfect unanimity, and that her fleets and armies were too formidable to admit any hope of success in the projected invasion, the French government exhausted its rage in empty menaces, and acts of perfidy and violence scarcely equalled in the darkest ages of society. At the very commencement of hostilities a number of English travellers and others were inhospitably seized and committed to custody as prisoners of war; and towards the end of May, General Mortier was sent to seize the electorate of Hanover, thus violating the neutrality of the German empire, and acting diametrically opposite to the French republicans themselves, who a few years before had concluded a separate peace with the Elector

of Hanover, while as King of Great Britain he continued at war with their country.

From the nature of the contest it might be expected that the war at home should be, for the first year, chiefly defensive and preparatory. England, however, not only kept her haughty enemy at bay, and disconcerted all his projects, but abroad her arms were as successful as could have been hoped. On the 22nd of June the island of St. Lucia was taken by General Grinfield and Commodore Hood; and on the 30th Tobago was surrendered to them by capitulation. The same meritorious commanders reduced the Dutch islands of Demerara and Essequibo, on the 19th of September; and on the 24th, the settlement of Berbice surrendered to his Britannic majesty's arms.

The calamities which the French endured at St. Domingo were dreadful in the extreme; and after the most obstinate resistance General Rochambeau was obliged to elude the vengeance of the revolted negroes by surrendering to the English, with the whole army of the Cape, two frigates, and some other vessels which lay in the harbour.

In Europe, as we have already hinted, few offensive operations could be undertaken by the English. On the 14th of September, however, Sir James Saumarez made an attack on the port of Granville, where he demolished the pier, and destroyed many of the vessels intended for the invasion of England. On the same day the town and fort of Dieppe were bombarded by Captain Owen; and several of the Dutch ports were severely bombarded on the 28th, when many of their vessels were destroyed.

The month of May, 1804, was marked by a change of the British ministry; Mr. Addington having resigned, and Mr. Pitt being appointed to resume his former office, together with the power of forming a new administration. Many reports had been circulated respecting a coalition between Mr. Pitt, Mr. Fox, Lord Grenville, &c. but the result proved otherwise; and the reinstated minister met with a most vigorous opposition from the minority. The additional force bill, the corn bill, and several others which he introduced into parliament, were opposed in the most strenuous manner; but all of them were passed by a considerable majority.

On the 6th of August intelligence was received of an occurrence, which being of the highest national importance, and reflecting the most brilliant honour on the British character, may probably be acceptable to our readers:—

Captain Nathaniel Dance had been dispatched from Canton on the 31st of January, in the *Earl Camden*, East Indiaman, having under his care, as senior commander, a fleet of twenty-six ships. After a tedious passage down the river he passed Macao Roads on the night of the 5th of February; and on the 14th a signal was made for seeing five strange sail to the S. W. which were soon discovered to be an enemy's squadron, consisting of a line of battle ship, two frigates, a corvette, and a brig.

Undaunted at this discovery, the British laid to in line of battle all night, and in the morning hoisted their colours, offering battle if the enemy chose to come down. About noon they seemed determined to make an attack, and endeavoured to cut off the retreat of the merchantmen; but the latter having stood towards them with a press of sail, and three of the vessels having opened their fire, the enemy steered away to the eastward, under all the sail they could set, and were pursued for upwards of two hours, when Captain Dance deemed it advisable, on account of the immense property at stake, to tack and proceed to the Straits of Malacca. On their arrival at Malacca, they were informed that the squadron they had engaged was that of Admiral Linois, consisting of the *Marengo*, of 84 guns, the *Belle Poule*, and *Semillante*, heavy frigates, a corvette of 28, and the Batavian brig *William*, of 18 guns.

It appears from the subsequent testimony of some English prisoners on board Linois's squadron, that when he saw the China fleet, he expressed his satisfaction to those captives, telling them it would prove a fortunate day for them, but a sorrowful one for their country; as it was his intention to give them one of the China ships, to carry them to Malacca, seven of the largest, he said, he should man and arm, and the remainder he was determined to sink!

Several other naval actions, though of smaller magnitude, took place this year, and added fresh laurels to the brows of our intrepid seamen. The ports of Dunkirk, Nieuport, Ostend, Trepont, Fecamp, and Etapes, were now blockaded; and Havre suffered a severe bombardment, while the boastful enemy vainly continued to threaten an invasion of England. It is likewise necessary to observe, that the war in India proved highly honourable to the British arms, and occasioned a considerable augmentation of territory in that country.

France, in the mean time, continued to groan under the most tyrannical despotism; and acts of violence were com-

mitted by her government disgraceful to civilization and the feelings of human nature. Thus, on pretence of a conspiracy against the First Consul, and the liberties of the republic, the amiable Duc D'Enghien was basely murdered at midnight, and buried in the garden of the Castle of Vincennes; Pichegru, though reported to have strangled himself in prison, was believed to have been racked to death; nineteen were sentenced to suffer death and confiscation of their goods; five were doomed to two years' imprisonment; five others were ordered to the police for correction, and eighteen were acquitted. Buonaparte thought fit to extend his *gracious* pardon to some of these persons: but General Moreau was driven into exile; and the heroic Georges suffered decapitation, exclaiming at the last moment, *Vive le Roi! Vive Louis XVIII.!*

Yet, notwithstanding these dreadful acts of violence and tyranny, to which may be added an attempt to poison Louis XVIII. the base seizure and imprisonment of Sir Thomas Rumbold, and the robbery of Mr. Wagstaffe, messenger to the court of Petersburg; in the course of this year Buonaparte found means to assume an imperial diadem, and the pope was compelled to sanction the coronation ceremony with his presence and benediction; the trees of liberty were pulled up by the new emperor's command in all parts of Paris and its environs; and the red cap of liberty was removed to make room for the imperial eagle!

As it was a known fact that the court of Spain had long furnished the French government with considerable quantities of money, and as even some of her naval preparations seemed calculated to excite suspicion, the British ministry demanded such satisfaction as might preserve the amity subsisting between the two countries. But as, after a long and protracted negotiation, no satisfactory answer could be obtained, it was deemed requisite to resort to more strenuous measures, and orders were accordingly issued for the detention of Spanish vessels till the subject under consideration should be finally arranged.

On the 2nd of October, Captain Moore discovered four large Spanish ships steering toward Cadiz, the van ship carrying a broad pennant, and the ship next her a rear-admiral's flag. After hailing to make them shorten sail, a shot was fired, and a message sent to the rear-admiral, informing him of Captain Moore's orders to detain his squadron, and expressing an earnest desire to avoid any effusion of blood. An engagement, however, immediately took

place, in which three of the Spanish vessels were taken, and a fourth (*La Mercedes*, of 36 guns and 280 men) unfortunately blew up; and, excepting 40 taken up by the Amphion's boats, all on board perished.

On the 14th of December the Spanish declaration of war against his Britannic majesty was published at Madrid; and on the 11th of January, 1805, letters of marque and reprisal were issued out against Spain, and a copy of the manifesto was laid before parliament on the 15th instant.

In consequence of the tenth report of the commissioners appointed to enquire into naval abuse, &c. Mr. Whitbread brought forward a motion in the house of Commons, on the 8th of April, against Lord Melville, as having connived at a gross misapplication of the public money, by his agent, Mr. Trotter; and two days afterward Mr. Pitt announced the resignation of the accused, as First Lord of the Admiralty.

On the 11th a treaty of concert was concluded between Great Britain and Russia; and every probable mean was used to engage Austria in the confederacy; but that power, for the present, was completely overawed by the gigantic and rapidly increasing conquests of Buonaparte, whose coronation as King of Italy was solemnized at Milan on the 26th of the ensuing month.

The ensuing month Vice-admiral Sir R. Calder discovered the combined squadrons of France and Spain, which had hitherto eluded the utmost vigilance of the British cruisers; and notwithstanding his inferiority of force, and the extreme haziness of the weather, he succeeded, after an action of four hours, in capturing the *San Rafael*, of 84 guns, and the *Firme* of 74. The fleets remained nearly in sight the two following days; and the conduct of the noble admiral, in not renewing the engagement, has suffered professional censure; but his courage is allowed to be unimpaired.

Whilst preparations were making on the continent for curbing the lawless and boundless rapacity of the French, our immortal Nelson was anxiously seeking the enemy, but without effect. On the 19th of October, however, he received the gratifying intelligence that they had put to sea; and on the 21st they appeared in the vicinity of Cape Trafalgar, presenting a line of 33 ships, of which 18 were French, and the remaining 15 Spanish. The British here

had but 27 vessels under his command; yet he rushed with noble impetuosity to the conflict, caused his ship to be carried alongside his old acquaintance, the *Santissima Trinidad*, and engage the combined forces at the very muzzles of their guns. The conflict was severe and obstinate; but, about three o'clock p. m. many of the enemy's ships having struck, their line gave way, and victory soon decided in favour of our gallant countrymen. Admiral Gravina, with ten ships, stood towards Cadiz, and some of the headmost ships in the van went off, leaving to his majesty's squadron nineteen ships of the line (of which two were first rates) and three flag officers, namely, Admiral Villeneuve, the commander-in-chief; Don J. M. D'Alava, vice-admiral; and the Spanish rear-admiral Don B. H. Cisneros. Thus the proud boast of France, that she had "made a marine of 20,000 sailors," was annihilated at a blow; the vaunted labour of ten years was shaken to its foundation; and Buonaparte's pleasing visions of *ships, colonies, and commerce* dissolved in air.

This brilliant victory, however, was dearly purchased, and the glories of the day were sadly overcast by the death of the gallant Lord Nelson, who received a musket ball in his left breast, about the middle of the action, and soon afterwards expired.

In the mean time Austria had been induced to join the coalition against France, and a continental war had commenced, which at first gave rise to very sanguine conjectures. The command of the army in Germany, however, being unfortunately given to Field Marshal Baron Mack, a man by no means qualified to oppose the promptitude, energy, and sudden evolutions of Buonaparte; and the French having succeeded in bringing the Austrians to action before they could be joined by the forces from Russia, a series of disasters succeeded each other with the greater rapidity. After the battles of Wertingen and Guntzburg, Ulm was surrendered; when 33,000 men marched out before a French division, and 3000 sick and wounded remained in the hospitals. The conquerors then pushed on to Vienna, and the citizens endured the mortification of being subject to a provisional government, while their lawful prince and his gallant adherents were compelled to retire towards Moravia. In Italy the Austrians were equally unsuccessful; and the fatal battle of Austerlitz, in which 100 pieces of cannon and 45 standards were taken by the enemy, terminated the

campaign and the war; an armistice being agreed on two days afterward, and a definitive treaty of peace concluded at Presburg on the 26th of December.

In India the British arms had been exercised against Holkar, Scindiah, &c.; and our troops, in some instances, sustained considerable loss; but the intrepidity and good fortune of General Lake at length triumphed over all difficulties; and in the month of December treaties of peace and amity were concluded between the native princes and the British government.

The 23rd of January was marked by the demise of that great statesman the Right Hon. William Pitt, in consequence of extreme debility, brought on by excessive anxiety and unremitting attention to business; and the unfortunate issue of the war on the continent is supposed to have contributed largely to hasten his death. Four days afterward the House of Commons decreed him a public funeral, which was accordingly solemnized, on the 22nd of February, in Westminster Abbey.

Whilst these events occupied the public mind at home the British arms proved successful on the coast of Africa, and the Cape of Good Hope was annexed to our conquests. The attack under General Sir D. Baird and Sir Home Popham was extremely gallant, and the terms of capitulation highly honourable to the British character.

An entire change now took place in the ministry, of which Lord Grenville became the head. Lord Henry Petty filled the vacant office of Mr. Pitt, as Chancellor of the Exchequer; the Right Hon. Thomas Lord Erskine was appointed Lord High Chancellor of Great Britain; and the Right Hon. C. J. Fox took the place of Lord Mulgrave, as one of his majesty's Principal Secretaries of State.

The illiberal conduct of the Prussian cabinet, in seizing various parts of the electorate of Hanover, and excluding all British vessels from their ports, induced his majesty, on the 5th of April, to lay an embargo on all Prussian shipping within the united kingdom: and measures were immediately taken for the blockade of the entrance of the rivers Ems, Weser, Elbe, and Trave; and on the 21st, Lord Grenville announced to the House of Lords the recall of our minister from Berlin, and the necessity of adopting, provisionally, measures of just retaliation against the commerce and navigation of Prussia. Mr. Fox made a similar communication to the Commons, and an address to his majesty was unanimously voted on the occasion.

Early in the ensuing month the fort and capital of Buenos Ayres, in South America, surrendered to a detachment of his majesty's troops under the command of Major-general Beresford, assisted by Sir Home Popham; and on the 20th of September, the treasure taken from this settlement was brought in eight waggons to the Bank of England, where 1,086,203 dollars, and a box filled with jewels and precious stones, were deposited; the field-pieces and colours taken on the same occasion were carried to the Tower.

The month of September was also marked by the news of some successful battles which took place early in July, in Sicily; particularly that of Maida, in which the French army sustained a signal defeat by the troops under the command of General Stuart. Upwards of 700 of the enemy were buried upon the field; and the prisoners, among whom were several officers, amounted to above a thousand. About a thousand more in different parts also notified their readiness to surrender. "In short," says the general, in his dispatches, "never has the pride of our presumptuous enemy been more severely humbled, nor the superiority of British troops more gloriously proved, than in the events of this memorable day." This decisive victory was soon followed by the surrender of Cotrone, with all its stores, magazines, &c. and the total evacuation of Calabria Ultra, in which single province, previous to the battle of Maida, the enemy had a distributed force of at least 9000 men. Gaeta, the Castle of Amantea, and other places, likewise surrendered to the British arms; and our brave countrymen were received with enthusiasm as the deliverers of an oppressed people.

The severe indisposition of Mr. Fox, which had for some time precluded his attention to business, terminated in his dissolution, on the 13th of September; and on the 10th of the following month his remains were conveyed with great pomp and solemnity to Westminster Abbey, where they were deposited within eighteen inches of the grave of the late illustrious William Pitt, and immediately adjoining the monument of the great Lord Chatham. Fifteen days after this ceremony the imperial parliament was dissolved, and writs issued for a new parliament to be assembled on the 15th of December.

Notwithstanding the infatuation which had so long blinded the court of Prussia to its true interests, the augmenting and inordinate pretensions of France drove it at length to adopt that determination of resistance which ought to have contributed to the success of the late coalition. An accom-

moderation of course took place with his Britannic majesty; pamphlets were distributed among the Prussian troops, inviting them to preserve their ancient glory; rewards and honours were liberally promised to all who should signalize their courage and loyalty; and every probable mean was used to ensure success. In the first operations the French obtained some trifling advantage; but soon afterward an important action took place, in which the French were defeated, with the loss of 6000 killed, and 14,000 taken prisoners. On subsequent occasions, however, the Prussian army sustained the most dreadful reverses; the battles of Jena and Auerstadt were productive of the most distressing consequences; whole armies, and strong fortresses, either from panic or treachery, surrendered without a blow; and the capital itself was abandoned to the insulting conqueror, who now resolved to push his victories into Poland.

In the month of March, by the influence of Buonaparte's advice, or *mandate*, the Grand Seignior declared war against Russia and England, and English residents and property were immediately seized; and the conduct of the Ottoman court was soon imitated by the deys of Algiers and Tripoli. The Servians, however, who had been expected to assist the Turks, took part with the Russians, and the latter severely injured the enemy by their blockade of all the ports in the Ionian and Egean seas; while a British fleet passed the Dardanelles, with a view to destroy the Turkish marine.

During these occurrences abroad, his Britannic majesty had an opportunity of demonstrating his attachment to the protestant religion. The bill commonly called the "Catholic Bill," having for its object the emancipation of papists from their present inability to hold places of trust, &c. in the British government, had been brought into parliament, and supported with the utmost force of argument by the ministers; but his majesty, from a conscientious adherence to his coronation oath and the established religion of his church, would never consent to its passing into a law. In consequence of this, the king dismissed his ministers, and placed at the head of the new administration the Duke of Portland, as First Lord of the Treasury; the Right Hon. Spencer Perceval, as Chancellor of the Exchequer; and the Right Hon. Lord Eldon, as Lord Chancellor. But previously to this an act was passed for the abolition of the slave trade—that nefarious and abominable traffic which had so long tarnished the glory of a free country, and lacerated

every humane bosom with the most poignant feelings and the deepest regret.

On the continent appearances were for some time favourable to the allies; and it was generally supposed that the laurels which Buonaparte had gathered in Italy and Germany were destined to wither in the morasses of Poland. The Russians, animated by the presence and intrepidity of their emperor, occasionally performed prodigies of valour, and the French troops were compelled to retreat before them with considerable loss. The surrender of Dantzic, however, on the 26th of May, seems to have completely changed the aspect of affairs: the eagle of victory again perched on the French standards; and subsequent to the battle of Friedland, which seems to have been nearly as dreadful and as unfortunate to the allies as those of Marengo, Austerlitz, and Jena, the victorious forces obtained easy possession of Königsberg, where they are said to have found several hundred thousand quintals of corn together with all the warlike stores sent from England, and a hundred and sixty thousand muskets not unpacked!

These successes on the part of the enemy seem to have determined the Emperor of Russia against the continuance of the war; and, strange to relate, the two hostile leaders, Alexander and Napoleon, were seen embracing each other at their conference on the Niemen, so early as the 24th of June. The King of Prussia, now no longer supported by Russia, was compelled to submit to his hard destiny; and a peace was concluded at Tilsit, by which the Prussian monarchy was diminished nearly one half.

At home, the violent opposition against his majesty's ministers rendered the dissolution of parliament expedient, and writs were issued for a new one, which was opened by commission on the 26th of June.

In the following month an action took place between the *Leopard* and the American frigate *Chesapeake*, which appeared likely to produce a serious misunderstanding between Great Britain and the United States. The *Chesapeake* was known to have several deserters from the British service on board; and though representations of the fact were made to the American secretary, no satisfactory answer was given. On the *Chesapeake* sailing for the Mediterranean, therefore, the captain of the *Leopard* was ordered to examine her for deserters, and on the search being peremptorily refused an action commenced in which the Americans had six men killed and two:

In consequence of this occurrence the inhabitants of Norfolk, and other parts of America, entered into some violent resolutions; and Mr. Jefferson thought proper to publish a proclamation, prohibiting all intercourse with our ships, and all supplies of water and provisions. Great numbers of privateers were also proposed to be fitted out at Baltimore, New York, Philadelphia, &c. But, from more recent accounts, it was hoped this unpleasant business would be amicably adjusted, though the event has proved otherwise.

The British ministry, understanding that Buonaparte designed to turn the naval force of Denmark against us, sent out an expedition, under Lord Cathcart and Admiral Gambier, in order to attack Copenhagen, and to obtain possession of the Danish fleet. This enterprise proved completely successful, being terminated on the 7th of September, by the capitulation of the town and citadel, after a bombardment of several days, and the surrender of the whole of the fleet, consisting of eighteen ships of the line, fourteen frigates, six brigs, and twenty-five gun-boats.

Shortly after the conclusion of the treaty of Tilsit, the restless and ambitious Corsican meditated the complete subversion of the Spanish monarchy, and resolved to erect on its ruins a splendid establishment for a branch of his own family. Accordingly he contrived, under a variety of specious pretences, to introduce a powerful body of his troops into Spain; he then induced the reigning monarch to make a formal renunciation of his crown; and having dexterously allured his successor, Ferdinand, beyond the protection of an army, who would probably have shed the last drop of their blood in his defence, he sent him a prisoner to France, and bestowed the sovereignty of Spain, and of the Indies, on his own brother Joseph.

An outrage so daring and unexampled naturally produced a general consternation among the deluded Spaniards; but no sooner had this universal panic subsided, than they broke out into open insurrection, and, in the first ebullitions of their rage and resentment, vowed eternal war against their base and unprincipled oppressors. The French troops were consequently defeated in various parts; and King Joseph, with his army, was compelled to retire from Madrid with the most disgraceful precipitation. Juntas, both supreme and central, were also formed; war was declared against France, in the name of Ferdinand VII. and de-

puties were dispatched to solicit the assistance of the British government, with which peace had been already proclaimed. This application was immediately attended to; an expedition was fitted out, under the command of Sir David Baird; and liberal supplies of arms, ammunition, and money, were sent to the patriotic Spaniards.

The successes, however, which had for some time crowned the arms of justice, soon reverted to the standards of oppression; for Buonaparte, with that promptitude which forms so distinguishing a trait in his character, re-appeared on the frontiers of Spain with a numerous army; and in a series of engagements vanquished the patriots, regained all the strong places which they had wrested from his myrmidons, and triumphantly entered the ill-fated capital.

The Prince regent of Portugal, who, under British protection, had emigrated with his court to the Brazils, addressed a spirited manifesto to his subjects, which produced a considerable sensation in the north of Portugal, and led to the expulsion of the French forces, who had invaded that part of the country. The Portuguese juntas which were formed on this occasion solicited the aid of Great Britain, and a numerous force, under Sir Arthur Wellesley, was sent over to attack the enemy's army, under General Junot. After some skirmishes a severe and obstinately contested battle was fought near the village of Vimiera; and such was the effect of British valour on this occasion, that the French were compelled to retreat, with the loss of 13 pieces of cannon, and about 3000 men in killed and wounded. On the following day, however, Sir Hugh Dalrymple, who had been sent from Gibraltar to take the command of all the British corps in Portugal, arrived at Cintra, the place which the conquerors had occupied after the battle; and a few hours after his arrival Junot sent in a flag of truce, proposing a cessation of hostilities. This was readily granted; and a convention was soon afterwards concluded between the two generals, by which the French army was to evacuate Portugal, on condition of being conveyed to France at the expense of the British. One article, however, which stipulated that the Russian fleet, then lying in the Tagus should either remain there unmolested, or return home, was peremptorily refused by Sir C. Cotton, to whom it was subsequently surrendered, on condition of being restored six months after the conclusion of peace between Russia and Great Britain. The convention of Cintra excited the

greatest dissatisfaction in England, and petitions poured from all parts of the kingdom, calling loudly for an enquiry into that unaccountable transaction. A formal declaration of his majesty's disapproval of both the armistice and the convention was officially communicated to Sir H. Dalkyple; and a court of enquiry was instituted, but without producing any thing worthy of notice

The commencement of the year 1809 was marked by an event equally glorious and disastrous to the British forces in Spain. Sir John Moore, who, with the troops under his command, had penetrated almost to the centre of the kingdom, was compelled, by the overwhelming numbers of the French, to retreat with the utmost precipitation. On this occasion he displayed the most consummate skill, and in the engagement which took place on his arrival at Corunna, the enemy were completely defeated, and compelled to fly in all directions; but whilst the British troops, literally covered with laurels, embarked on board their transports without molestation, they had to regret the loss of their heroic commander, who fell at the commencement of the battle.

The hope of ultimately succeeding against the tyrant of the continent had nearly subsided, when the Austrian cabinet published a declaration of war against France. Buonaparte, however, having contrived to force himself between the principal divisions of the Austrian army, defeated them in several engagements, and soon made himself master of Vienna; and notwithstanding a serious repulse which he received from the Archduke Charles, on the bank of the Danube, the battle of Wagram was so decisive, that the Emperor of Austria was obliged to request a cessation of hostilities, and subsequently to conclude a peace, upon very disadvantageous terms.

Whilst these occurrences were passing on the continent, the British cabinet hoped, by making a diversion in favour of the allies, to check the progress of the enemy. And Sir Arthur Wellesley having again defeated the French troops, and chased them from Portugal, marched with a numerous force into Spain, and formed a junction with the Spanish army commanded by General Cuesta, at Talavera. On the 27th of July an engagement took place, in which the French were compelled to retreat across the Alberche, with the loss of 20 pieces of cannon, a considerable quantity of ammunition, and nearly 10,000 men in killed and wounded. But as the British general received intelligence soon after the

battle, that the enemy designed to attack him both in front and in rear with a very superior force, he immediately recrossed the Tagus, and retreated to a strong position in Portugal. It must be added, that the heroic bravery exhibited by Sir Arthur in the battle of Talavera, induced his Britannic majesty to create him a peer, by the title of Viscount Wellington.

With a view to occasion a further diversion on behalf of the Austrians, and also to attempt the capture or destruction of the French vessels lying in the Scheldt, a British army of 50,000 men was landed on the island of Walcheren; but a considerable time having elapsed prior to the reduction of Flushing, the enemy collected a numerous force, raised several formidable batteries, and conveyed their ships up the river beyond Fort Lillo. That part of the country also where the English might have landed, was completely inundated. Walcheren, the only fruit of this expensive and unfortunate expedition, was to have been retained by the conquerors, for the purpose of shutting up the mouth of the Scheldt, and of facilitating the introduction of British manufactures into Holland. This design, however, was rendered abortive by the unhealthiness of the climate; and after great numbers of the troops had fallen a sacrifice, the British army evacuated the island, on the 9th of December, having previously destroyed the fortifications, arsenal, docks, and basin. Some old ships, filled with stones, were also sunk at the entrance of the Scheldt, to preclude an escape of the French fleet from the place of its retreat.

The parliamentary proceedings of this year were rendered remarkable by an enquiry into the conduct of the Duke of York, as commander in chief, in consequence of his having been charged with an illegal disposal of commissions in the army. His royal highness, though acquitted by a majority of the House of Commons, resigned his office, in which he was succeeded by Sir David Dundas.

Among the gallant actions which were performed this year by the British navy, we must notice an attack upon the French fleet in Basque Roads, by Lord Gambier and Lord Cochrane, on the 11th and 12th of April; when one ship of 120 guns, five of 74, and two frigates, were driven on shore in such a situation as ensured their destruction; and one of 80, two of 74, one of 50 guns, and three frigates, were burnt. And to this exploit must be added the capture of a Russian flotilla and convoy in the Baltic, by Sir J. Saumarez; the destruction of three sail of the line, two fri-

gates, and twenty French transports, in the Bay of Rosas, by Lord Collingwood; and the reduction of the islands of Cayenne, Martinique, Isch, and Florida, and the city of St. Domingo.

The commencement of the year 1810 was marked by the entrance of the French into Andalusia, their manoeuvres having completely deceived the Spaniards. On the 29th of January they approached within two leagues of Seville, from which the inhabitants fled in all directions : and in consequence of the general alarm excited by this irruption, immense numbers sought an asylum within the walls of Cadiz. After some time however the general panic subsided, as little doubt was entertained of the safety of Cadiz, and a considerable supply of provisions arrived to relieve the wants of the increased population. The Spanish fleet lying in the harbour was placed at the disposal of Admiral Purvis : and both the military and political government of the fortress were entrusted to a mercantile junta, who were considered the most likely to adopt effectual measures for the public security. About the beginning of February the French entered Malaga, which was given up to the pillage of their troops for two days. Almeida surrendered to the army under Massena on the 27th of August ; and Seville was reduced to the most wretched condition by the unremitting demands of the invaders, and the brutality of their General, Soult. The flame of patriotism, however, continued to spread among the Spaniards, whose desultory mode of warfare against their cruel enemy was, in many instances, crowned with success. And notwithstanding the pompous gasconades of the French with respect to Portugal, Lisbon remained secure beneath the shelter of the British arms, and the proud Massena thought proper to retreat before Lord Wellington after the battle of Busaco.

Whilst these occurrences were taking place in Spain and Portugal, Louis Buonaparte, having in vain attempted to ameliorate the condition of the Hollanders, published a formal abdication of the crown; and on the 9th of July this unfortunate country was annexed to France, by a decree of the Corsican tyrant, who, after divorcing his Empress Josephine, had espoused the Archduchess Maria Louisa, on the first of April!

At home a considerable stir was occasioned for a short time by the punishment of Sir Francis Burdett, M. P. who was confined in the Tower for some months, for a breach of privilege.

During the year 1810, the indisposition, both bodily and mental, which attended the king, involved the nation in sorrow, and rendered it necessary that parliament should turn their attention to the subject of a regency.

From motives of delicacy some time was suffered to elapse before any decisive measures were adopted by parliament; and after repeated adjournments it was deemed advisable to proceed by bill rather than address. Accordingly, at the commencement of the year 1811, a regency bill was prepared, and passed through both houses of parliament; by which it was enacted, that his Royal Highness the Prince of Wales should exercise the office and authority of Regent of the united kingdom of England and Ireland, in the name and on the behalf of his majesty, during the continuance of the indisposition which had rendered this measure necessary. But as the recovery of the sovereign was still contemplated as a probable circumstance, it was enacted, that the power of conferring any title of nobility should be suspended for twelve months; and that all offices and pensions which might be granted by the Prince of Wales should continue only during his regency, unless subsequently approved and ratified by his august parent. The care of the royal person was also committed to her majesty.

On the 27th of January the Prince entered upon the high office committed to him, and the 6th of the following month was appointed for swearing him in as regent of the united kingdom.

Parliament was opened by commission on the 12th of February; and few bills of an interesting nature were passed during this session. On the 24th of July it was prorogued by commission to the 12th of November; and on that day it was further prorogued to the 7th of January ensuing.

On the continent various successes attended the arms of the Spaniards and Portuguese and those of their cruel invaders; but, generally speaking, whenever the British forces engaged, Buonaparte had the mortification to discover that his legions were not *invincible*; and some victories were obtained which will probably never be obliterated from the recollection of Britons, or of the patriotic bands on whose behalf they were achieved.

The battle of Barossa, which took place on the 5th of March, was fought under such peculiar circumstances, and with such disparity of numbers, that Lieutenant-general Graham, in his dispatches to the Earl of Liverpool, begs leave to make a particular statement, in order to justify

himself from the imputation of rashness in his attempt. From this statement it appears, that after a nocturnal march of sixteen hours from the camp near Veger, the allied army arrived in the morning on the low ridge of Barossa, about four miles to the southward of the Santi Petri river. This height extends inland about a mile and a half, containing on the north the extensive healthy plain of Chiclana. A large forest of pines skirts the plain, and circles round the height at some distance, terminating down to the Santi Petri; the intermediate space between the forest and the north side of the height being uneven and broken. A well conducted attack on the rear of the enemy's lines by the vanguard of the Spanish army having opened a communication with the Isle de Leon, General Graham received directions to move down from the position of Barossa to that of the Torre de Bermosa, about half way to the Santi Petri, in order to secure the communication across that river, over which a bridge had been recently erected. This latter position occupies a narrow woody ridge, the right on the sea cliff, the left falling down to the Almanza creek, on the edge of the marsh; while a hard sandy beach affords an easy communication between the western points of these two positions. General Graham's division having halted on the eastern slope of the Barossa height, was marched, about twelve o'clock, through the wood towards the Bermosa, cavalry patrols having previously proceeded towards Chiclana, without discovering the enemy. On the march intelligence was received that the enemy had appeared in force on the plain, and was advancing towards the heights of Barossa. As that position was in reality the key of that of Santi Petri, General Graham immediately counter-marched, in order to support the troops left for its defence, and this manoeuvre was executed with the greatest alacrity. It was impossible, however, on such difficult ground, to preserve order in the columns, and there was never time to restore it completely. But before the troops could get entirely disentangled from the wood, those on the Barossa height were seen returning from it; while the enemy's left wing was rapidly ascending, his right standing on the plain, at the edge of the wood, within cannon shot. As a retreat, under these circumstances, might have proved extremely detrimental to the whole allied army, an immediate attack was determined on, notwithstanding the numbers and position of the foe. As soon as the infantry was hastily collected together, a battery of ten guns opened, and kept

up a most destructive fire in the centre; while the right wing proceeded to the attack of General Ruffin's division on the hill, and drove them from their position; and the left wing decided the defeat of the division under General Laval. A reserve formed beyond the narrow valley, across which the enemy was closely pursued, shared the same fate; and in less than an hour and a half from the commencement of the action, the whole of the enemy's troops were in full retreat. In this brilliant affair the French are supposed to have lost about 3000 in killed, wounded, and missing; and ten eagles and six pieces of cannon fell into the hands of the conquerors. Generals Ruffin, Rosseau, and Bellegrade, were also taken prisoners; the former of whom was wounded, and the second died soon after the engagement.

It may be proper to add, that when the expedition against the rear of the enemy was planned, an arrangement was made with Sir R. G. Keats, for an attack on the French batteries in Cadiz Bay, in order to effect a division. This plan, however, could not be executed, on account of the unfavourable weather, till the day after the battle of Barossa, when it was carried into effect with all the coolness and intrepidity of British seamen. All the batteries on the east side of the bay, from Rota to St. Mary's with the exception of Fort Catalina, were carried by storm, the guns spiked, and the works completely destroyed.

Another brilliant display of British valour and intrepidity occurred in the battle of Albuera, which took place between Marshal Soult and Marshal Sir W. Beresford, on the 16th of June.

On the 12th it was reported that Soult had broken up from Seville, and had advanced towards Estramadura, notwithstanding the rumour which had been previously circulated that he was wholly engaged in strengthening the outworks of Seville, and that all his actions indicated a design of remaining on the defensive in Andalusia. On the receipt of this intelligence Sir W. Beresford raised the siege of Badajoz, without sustaining any loss; and having assembled the forces under his command, formed a junction, on the 15th, with generals Blake and Castanos, at Albuera. Next day he was attacked by the enemy, over whom the eagle of victory appeared for some time to hover, in consequence of the great superiority of his cavalry, and a numerous and heavy artillery. At length, however, the inflexible bravery of the British troops turned the balance in favour of the allies; and in the night of the 17th the French were

obliged to retire across the river, leaving about 2000 dead on the field of battle, and from 900 to 1000 taken prisoners. The losses sustained by the victors were also extremely great; but the gallant commander remarks in his dispatches to Lord Wellington, "It is impossible to enumerate every instance of discipline and valour shewn on this severely contested day; but never were troops that more valiantly or more gloriously maintained the honour of their respective countries. Every individual most nobly did his duty; and it was observed that our dead, particularly the 57th regiment, were lying as they had fought, in ranks, and every wound was in front."—It appears, indeed, that prodigies of valour were shewn by the English and their allies on this occasion, and that instances of *individual* heroism were particularly conspicuous; in proof of which it may be interesting to subjoin the following particulars related in the House of Commons by the Chancellor of the Exchequer: In the hottest of the engagement, an ensign of the name of Thompson was called upon to surrender the colours which he held, but he resolutely declared he would never give them up but with his existence, and he fell a victim to his patriotic bravery. Another ensign, of the name of Walsh, having fallen on the field severely wounded, tore his colours from the staff, and thrust them into his bosom, where they were found after his death. Sir W. Beresford was also attacked by one of the Polish cavalry, whom he dismounted, with the view of saving his life; but as the man persisted in his first design, one of our dragoons flew to the assistance of his beloved commander, and killed the assailant.

Of the other affairs of the peninsula our limits only permit us to remark, that in consequence of the skilful and judicious conduct of Lord Wellington, and the cordial unanimity subsisting between the British and the Spanish and Portuguese commanders, the French, notwithstanding some occasional successes, found it impossible to carry into execution their late boastful promise of speedily crushing every appearance of rebellion; and the patriotic ardour of the natives received the strongest encouragement from the disappointments and the diminished reputation of the enemy.

Of the naval exploits which graced this year the most prominent were, the defeat of the French and Italian squadrons near the isle of Lissa; and the reduction of the islands of Banda, Ternate, and Java.

The combined squadrons alluded to consisted of five frigates, one corvette, one brig, two schooners, one gun-boat,

and one zebec, forming a total force of 272 guns, and 2655 men; to which were opposed the British ships *Amphion*, *Cerberus*, *Volage*, and *Active*, carrying in all but 124 guns, and 879 men. On the 13th of March an enemy's fleet having been discovered off the north point of the island of Lissa, the action commenced by the British squadron firing on the headmost ships, as they came within range. After vainly endeavouring to break the line in two places, the enemy's vessels endeavoured to place the British between two fires; but in this attempt they were so warmly received, and rendered so unmanageable, that they went on shore on the rocks of Lissa, in the greatest confusion. The British line was then wore to renew the action; the *Amphion* not half a cable's length from the shore, the remainder of the enemy's starboard division passing under her stern and engaging her at leeward; whilst the larboard division got to windward, and engaged the *Cerberus*, *Active*, and *Volage*. In this situation the action recommenced with great fury; the British vessels being frequently exposed to a raking fire from the enemy. "Nothing, however," says Captain Hoste, "could withstand the brave squadron I had the honour to command. The *Flora* having struck her colours at twenty minutes past eleven a. m. and the *Bellona* having followed her example, the enemy to windward endeavoured to make off, but were followed up as close as the disabled state of his majesty's ships would permit; and the *Active* and *Cerberus* were enabled at three p. m. to compel the sternmost of them to surrender, when the action ceased, leaving us in possession of the *Corona*, of 44 guns, and the *Bellona*, of 32 guns (the French commodore :) the *Favourite*, of 44 guns, ran on shore, where she soon blew up with a dreadful explosion; the corvette of the enemy making all possible sail to the north-west, and two frigates crowding sail for the port of *Lessina*, the brig making off to the south east, and the small craft flying in every direction."

The capture of the island of Banda, on the 9th of August, was also particularly honourable to the British arms. The attack was made on this settlement during a dark and squally night, by somewhat less than 200 men, consisting of seamen and marines, and about forty of the Madras European regiment, under the command of Captain Cole. A dark cloud, with a fall of rain, covered their landing within a hundred yards of a battery of ten guns, which was taken in the rear, and an officer and his guard were made prisoners, though the enemy were at their guns, with lighted matches

having discovered the approach of his Britannic majesty's vessels on the preceding day. At the approach of daylight, the assailants procured a guide to conduct them to the walls of the Castle of Belgica; and after leaving the guard in charge of the battery, the party made a rapid movement round the skirts of the town, where the bugle was sounding an alarm among the enemy. In twenty minutes scaling ladders were placed against the walls of the outer pentagon of Belgica; and the gallantry and celerity with which they were hauled up, after the outer work was carried, and placed for the attack of the inner work, under a sharp fire from the garrison, were truly astonishing. The enemy, after firing three guns, and keeping up an ineffectual discharge of musketry for about ten or fifteen minutes, fled in all directions, leaving their colonel-commandant and ten others dead, and two officers and thirty privates in the hands of the victors. The day now beaming on the British, discovered to them the fort of Nassau, and the sea defences at their feet, and the enemy at their guns at the different posts. Admiral Drury then dispatched a flag of truce to the governor, demanding the immediate surrender of the fort, and promising to protect all private property. At sunrise the Dutch flag was hoisted in Nassau, and the sea batteries opened a fire on one of the British vessels then approaching the harbour. But on a second flag of truce being sent to the governor, with a menace of storming the fort, and laying the town in ashes, if the colours were not instantly struck, an unqualified surrender was agreed on; and the British heroes found themselves in possession of the two forts, and several batteries, mounting 120 pieces of cannon, and defended by nearly 700 disciplined troops, and the militia.

It is also necessary to add, that the island of Ternate, though so famous for the strength of its fortifications, and memorable for its defence in the last war against the English, was completely subjugated in less than one day (the 29th of August) by a very inconsiderable force. From official documents, it appears that the place was defended by 500 regular troops, with a very large proportion of Officers and Europeans, aided by the marine department, the Dutch inhabitants and burghers, and the King of Ternate's forces, of whom 250 were in the field, and an equal number from the Sultan of Tidore and the adjacent islands in alliance with the Dutch. But such were the

gallantry, coolness, and precision of the British, that nothing could ultimately withstand their arms.

After a short but arduous campaign, in the month of August, Batavia, the capital of the island of Java, was taken by the British troops under Sir Samuel Auchmuty, the enemy's most formidable works were carried, and themselves driven from the kingdoms of Bantam and Jacatra; so that, as Lord Minto observes in his dispatches to the directors of the East India Company, "an empire which for two centuries has contributed greatly to the power, prosperity, and grandeur of one of the principal and most respected states of Europe, has been thus wrested from the short usurpation of the French government, added to the dominion of the British crown, and converted from a seat of hostile machination and commercial competition into an augmentation of British power and prosperity. For this signal and illustrious service, Great Britain is indebted to the truly British intrepidity of as brave an army as ever did honour to our country; to the professional skill and spirit of their officers; and to the wisdom, decision, and firmness of the eminent man who directed their courage, and led them to victory."

But while our British tars were gathering a profusion of laurels in different parts, an unpleasant occurrence took place between one of his majesty's vessels and a ship belonging to the American government; which threatened nothing less in its consequences than a war between those countries, and to which it may be considered as the prelude.

The particulars of the engagement are thus related by Captain Bingham of the *Little Belt*:—"At half past three p. m. on the 16th of May, a strange sail, which had been previously discovered, appeared inclined to give chase, when I made the private signal, which was not answered. At half past six, finding he gained considerably on us, and clearly discerning the stars in his broad pennant, I thought proper to bring to, and hoist the colours, that no mistake might arise, and that he might see what we were. The ship was therefore brought to, the colours hoisted, the guns double shotted, and every preparation made in case of a surprise. By his manner of steering down, he evidently wished to lay his ship in a position for raking, which I frustrated by wearing three times. On his coming within hail, about a quarter past eight, I hailed, and asked what ship it was. He repeated my question. I again hailed,

and asked what ship it was. He again repeated my words, and fired a broadside, which I immediately returned. The action then became general, and continued so for three quarters of an hour, when he ceased firing, and appeared to be on fire about the main hatchway. I was then obliged to desist from firing, as the ship falling off no gun would bear, and I had no aftersail to keep her to: all the rigging and sails were cut to pieces, and not a brace or bowline left. He then asked what ship this was; and on being told, he asked if I had struck my colours. I answered no, and asked what ship that was; and, as plainly as I could understand, he answered the United States frigate.

“Next morning he bore up again, and sent a boat on board, with an officer, and a message from Commodore Rogers, to say that he lamented the unfortunate affair which had happened; and that, had he known our force was so inferior, he should not have fired at us. I asked his motive for having fired at all; and his reply was, that we fired the first gun at him; but this was positively not the case. He offered me every assistance I should stand in need of, and submitted to me that I had better put into one of the ports of the United States, which I immediately declined. By the manner in which he apologized, it appeared evident, that had he fallen in with a British frigate, he would certainly have brought her to action: and what further confirms me in that opinion is, that his guns were not only loaded with round and grape shot, but with every scrap of iron that could possibly be collected.”

Such is the statement of Captain Bingham, of whose veracity we have not the smallest doubt. Commodore Rogers, however, asserts positively that the *Little Belt* fired first, and that, circumstanced as he was, it was a duty incumbent on him to avenge the insult committed upon the American flag. This statement was also confirmed by all the witnesses whom he thought proper to bring forward, when the subject underwent a full investigation, by the order of the American government.

On the 7th of January, 1812, the sixth session of the present parliament was opened by commission. The speech delivered on that occasion expressed the deepest sorrow for the continuance of his majesty's indisposition—the regent's approbation of the conduct of the British officers and troops in Spain and Portugal—his satisfaction with the reduction of the islands of Java, Bourbon, and Mauritius—an assurance that conciliatory measures were intended to be

adopted toward America—and a firm reliance on the liberality of parliament for the necessary supplies. To this speech an address was moved, and carried in both houses, as usual.

On the 18th of February the restrictions imposed on the Prince of Wales ceased, according to the provisions of the regency act: and it was now confidently supposed, by a numerous party both in England and Ireland, that a complete change of administration would take place; but this expectation was disappointed, as there was no alteration whatever in the leading members of the ministry, so completely had they gained the confidence of the prince.

No event of importance took place in the course of this year in the affairs of the peninsula, till the 6th of April, when the important fortress of Badajoz, which might be considered as the key to Spain, was taken by storm, by the army under Lord Wellington; prodigies of valour were performed beneath its walls, in which the Portuguese vied with the British. Some idea may be formed of the courage and perseverance of the assailants by the loss of the victors during the siege, which, owing to the amazing strength of the place, amounted to nearly 5000, killed or wounded. But this was by no means an useless sacrifice; for Portugal was thus freed from the dominion of France, the position of the French armies in Andalusia much endangered, and a way opened for Lord Wellington and his victorious army into the heart of Spain: a change also in the politics of Russia about this time made it necessary for Buonaparte to withdraw his armies toward the north of Europe, and inspired a hope that this unhappy country, by the help of a British army, headed by such a general, might ultimately be rescued from the dominion of its oppressors.

In the month of June a partial change took place in the ministry, in consequence of the assassination of Mr. Perceval in his way to the House of Commons; and owing to the disagreement of the various parties in the cabinet, and the inability of the remaining members of the ministry to carry their measures, the regent was three weeks without an administration; till at length the pressure of public business compelled him to restore those men who had been before declared incompetent. The Earl of Liverpool was in consequence made First Lord of the Treasury, and Mr. Vansittart Chancellor of the Exchequer. Such an arrangement excited considerable anxiety in the minds of all those who were not obstinately attached to the party then in power; but this

anxiety has been in a great measure dispelled by their conduct, which certainly manifested an inclination to listen to the public voice, and which has been marked by insults far more glorious and beneficial than could have been expected.

Various causes of dissatisfaction had for a long time been exhibited by the government of America, among which the orders in council for the blockade of their ports was the most considerable. This was for some time the subject of discussion in the British parliament, and they were repealed in consequence; but the official notice of this repeal did not arrive in America till it was too late to prevent the declaration of war which that government had made against Great Britain.

The hopes which had been raised in the minds of those who were well-wishers to the cause of Spain, were soon partially realized. On the 24th of July was fought the battle of Salamanca; which, even from the account of the French general himself, was most decisive and glorious to the British arms. The enemy fled in all directions, and the pursuit was continued the following day. "It is impossible," says Lord Wellington, in his dispatches, "to form a conjecture of the amount of the enemy's loss in this action; but from all reports it is very considerable. We have taken from them eleven pieces of cannon, several ammunition waggons, two eagles, and six colours; and one general, three colonels, three lieutenant-colonels, 130 officers of inferior rank, and between six and seven thousand soldiers, are prisoners; and our detachments are sending in more every moment. The number of dead in the field is very large. I am informed that Marshal Marmont is badly wounded, and has lost one of his arms, and that four general officers have been killed, and several wounded. Such an advantage could not have been acquired without material loss on our side; but it certainly has not been of a magnitude to distress the army or to cripple its operations."

The loss of the British in this engagement was 694 killed, 4260 wounded, and 255 missing; and it cannot be supposed but that of the enemy must be considerably more, besides prisoners. The British commander, who was in consequence of the late victory created a marquis, followed up these important successes. On the 12th of August he entered Madrid, amidst the acclamations of the inhabitants, who hailed him as their deliverer. He then advanced to Burgos, to dislodge from that city the remains of the French army, of which Marshal Massena had now the command.

Large tracts of Spain were thus relieved from the presence of their invaders. On the 24th of September the French raised the siege of Cadiz, and concentrated all their forces in Seville, under Marshal Soult. About the same time the Marquis of Wellington laid siege to the Castle of Burgos, and daily expectations were entertained of its fall; but after several assaults, in which the valour of the British was conspicuously displayed, as well as that of the besieged, it was found necessary to raise the siege. In the north, Marshal Massena had been re-organizing the discomfited army of Marmont, and in the south, Marshals Soult and Suchet, having united their forces, were advancing northward. The consequence was the retreat of the English forces towards the frontiers of Portugal, and the re-occupation of Madrid, Valladolid, &c. by the French.

We have already noticed the change which took place in the politics of Russia at the commencement of this year. Our limits will not permit us to enter into the causes of a change which contributed so much towards the liberty and happiness of Europe, but a brief outline of the facts, we hope, will be acceptable to our readers. On the 23rd of April the Emperor of Russia took the command of his army, and moved his head quarters to Wilna. About the same time the various corps of the French army moved towards Poland. On the 9th of May Buonaparte set out from St. Cloud to join his army, which, according to an estimate given from the War Office at Paris, consisted of 640,000 men, of various nations, as follows:—

Poles,	100,000	Italians,	50,000
Confederation	} 120,000	Austrians,	90,000
of the Rhine,		Prussians,	30,000
French,	250,000		

This immense armament, which for its numbers, discipline, and equipment, has been scarcely equalled in the annals of modern times, advanced without much opposition through Poland. Buonaparte, by a solemn act, having pledged himself to restore to independence those provinces of that unhappy country which had been so unjustly seized by Russia, was at first received by the whole population with enthusiasm; and Poland thus became a *point d'appui*, from which the French might direct their operations against Russia.

The Russians retreated in good order before the French several weeks, gradually concentrating their forces; in

which time several bloody skirmishes took place, where the loss on both sides was considerable. At length on the 7th of September, at the heights of Borodino, they made a stand; and the battle which followed, though by no means decisive, was certainly the commencement of Buonaparte's disasters. The conflict was most sanguinary. The force on each side was estimated at 130,000 men, and the loss of each at least 20,000; both claimed the victory, but the subsequent advancement of the French to Moscow seems to imply that it rested with them, though it was dearly bought and may be considered as the cause of their destruction. On the 14th the French entered the ancient capital of the czars, but the Russians chose rather to bury themselves in its ruins than to allow the French an undisturbed possession of it. "On the 16th," says the French bulletin, "three or four hundred ruffians set fire to the city in 500 different places at the same moment, by order of the governor, Rostopchin. Five-sixths of the houses were built of wood; the fire spread with a prodigious rapidity; it was an ocean of flame. Churches, of which there were 1600---above 1000 palaces---immense magazines---nearly all have fallen a prey to the flames. The Kremlin has been preserved, but nine-tenths of the city have been burned. The fires subsided on the 19th and 20th."

It will readily be credited that Moscow in flames afforded but a poor supply for the necessities of the French army, exhausted as it was by the dreadful conflicts in which it had been recently engaged. "Moscow," continues the bulletin, "is at present a truly unhealthy and impure sink. A population of 200,000, wandering in the neighbouring woods, dying with hunger, come to these ruins to seek what remains to support life." In consequence of this, on the 15th of October the French began their retreat, and it appears from this time that Buonaparte began to feel the difficulties which attended his situation, and was undecided what course to pursue. Harassed on every hand by the Cossacks, a whole population in arms against him, and an army in his rear, in numbers and discipline nearly equal to his own, his retreat would have been dangerous enough without the concurring influence of the elements, which began to rage around him. On the 7th of November he reached Smolensk, and from that time the cold began to increase, and for some days the thermometer was 16 or 18 degrees below freezing point. The roads were covered with ice: in a few days 30,000 horses perished, and it was necessary to

abandon good part of the cannon, ammunition, and provisions.

On the 16th of November the Russian army, commanded by Field Marshal Prince Kutusoff, came up with the French near Krasnoi, and a partial action took place, in which the corps under Davoust was completely defeated, with the loss of nearly 10,000 men. On the following day the Russian general, willing to follow up his successes, intercepted the corps under Marshal Ney, which shared the same fate; 12,000 prisoners, 37 pieces of cannon, all the baggage and military chests, &c. were the fruits of this victory.

The French continued their retreat through this inhospitable country, their situation growing each day more dreadful. At length Buonaparte, aware of the danger which threatened, not only the airy visions of his ambition, but also his life, and preferring a winter residence in Paris to the chilling prospect around him, set out for that capital. For some time previous to this, it appears that his situation was critical indeed; in the language of the bulletin, "the cavalry was dismounted to such a degree, that it was necessary to collect the officers who had still a horse remaining, in order to form four companies of 150 men each. The generals then performed the functions of captains, and the colonels those of subalterns. This *sacred squadron* did not lose sight of the emperor in all the movements of the army." But it appears, from various accounts, which may be depended upon, that this *sacred squadron* did not attend him the remainder of his journey to Paris; for in a short time this emperor, who had commanded an army of 640,000 men, preferred a shameful *flight*, alone and unattended, to an honourable retreat with those who had suffered so much to promote the objects of his ambition. On the 5th of August he set out for Paris. It is said, that his equipage consisted of a single sledge, that he was in constant danger from the Cossacks who hovered around him, and who on one occasion, were so near him that they entered a house in pursuit of him immediately after he had quitted it. But notwithstanding these dangers, he arrived safely in his own capital on the 19th, while the shattered remains of his army retreated by various routes to Wilna, where they took up their winter quarters. Thus terminated one of the most calamitous campaigns recorded in history; and while we cannot help rejoicing that the projects excited by an unbounded ambition were thus frustrated, yet humanity will teach us to look with equal compassion on the victors and

the vanquished, and will mingle many painful feelings with our joy.

The commencement of the year 1813 was a time of awful suspense and anxiety to every nation in Europe, and at the same time of unparalleled exertion. In France, Napoleon employed the winter in reviews and preparations for the new campaign, while every possible energy was exerted to augment the armies in Poland and in Spain. The King of Prussia, who in all probability most unwillingly joined the confederation against the Emperor of Russia, took the earliest opportunity of throwing off the French yoke. In Spain, the Marquis of Wellington vigorously prepared for a new campaign, and being ably assisted by the British ministry, was ready, early in the year, to take the field with more than 100,000 men, well paid, armed, and equipped.

The public attention at home was now considerably excited by an investigation into the conduct of the Princess of Wales, which took place in consequence of a letter addressed by her to the regent, complaining of the restrictions which had been laid on her intercourse with the Princess Charlotte, her daughter. This investigation terminated in the establishment of her innocence, and the Common Hall of the city of London voted an address to her royal highness on the occasion.

On the 13th of March the House of Commons, after three days' debate, resolved to go into a committee on the question of catholic emancipation; but after much debate in both houses the bill was negatived by a considerable majority.

The seat of war in the north was this year transferred from Russia to Germany. Wilna was soon found to be an unsafe place for the French corps who had escaped in the retreat from Moscow, as the combined Russian and Prussian armies advanced without any opposition through Poland, and at the beginning of the month of April the head quarters of the Emperor of Russia were at Dresden.

About the same time Buonaparte left Paris to join his army, to recruit which he had bestowed incredible exertions during the winter. On the 2nd of May was fought the important battle of Lutzen, in which it appears the French were victorious, as the Russians, in consequence, retreated before them, though there is reason to believe the loss on both sides was nearly equal. The battle of Lutzen was followed by a succession of engagements, which were contested with the utmost obstinacy on both sides. The

last was fought on the 21st of May, at a place called Wurtchen, between Bautzen and Goerlitz, in Lusatia, and maintained with extraordinary fury for two days. The Allies were obliged to continue their retreat, which they effected, however, as on the former occasions, without the loss of cannon or colours, or of any material number of prisoners. On the 23rd an armistice was concluded between the allies and the French, to continue till the 26th of July.

The campaign in Spain opened with brighter prospects than at any former period. Lord Wellington entered Salamanca on the 26th of May, and advanced with little opposition to Burgos, after a succession of brilliant affairs, which took place between the advanced guard of the allied army and the rear guard of the French, who, on the 13th of June, abandoned Burgos, after blowing up the castle.

On the 20th of June the army under the Marquis of Wellington came within sight of that of the French, commanded by Joseph Buonaparte, with Marshal Jourdan as his major-general, and which had taken up a very strong position in front of Vittoria. Lord Wellington attacked the enemy on the succeeding day, and after a severe conflict, gained a complete victory over them, driving them successively from all their positions, and taking from them 151 pieces of cannon, 415 waggons of ammunition, all their baggage, provisions, cattle, treasure, &c. and a considerable number of prisoners. The loss of the enemy was estimated at upwards of 20,000 men. The loss of the allied army amounted to 730 killed, and 4110 wounded, of which nearly two-thirds were British. The difficult nature of the country alone prevented the entire demolition of the enemy's army, which was however necessarily reduced to a state of great weakness and inefficiency. Both the Spanish and Portuguese behaved with great gallantry. The movements directed by Lord Wellington were so judicious, that the French found their retreat by the high road from Vittoria to Bayonne intercepted. They accordingly turned off towards Pamplona, closely followed and harassed by the allied army; and in the pursuit the only gun which they had preserved was taken from them. They entered Pamplona with only one howitzer in their train. They did not, however, long remain there, but continued their retreat, by Roncesvalles into France. On the 26th of June Pamplona was invested. Thus was every part of Spain rescued from the presence and power of the French, excepting Pamplona and one or two fortresses on the Bay of Biscay, and the pro-

vinces of Arragon, Valencia, and Catalonra. Of these provinces they would soon have been divested, had not the comprehensive plan of operations devised by Lord Wellington been marred in its execution by one of his subordinate generals: Sir John Murray, who commanded at Alicant, had been ordered to proceed to Tarragona by sea, in order to possess himself of that garrison; but this expedition failed entirely, in consequence of the *extreme caution* of that general, who thought proper to retreat from the mere apprehensions of the approach of a French army not superior to his own.

During these transactions in Europe the war with America was carried on with various success. At sea the glory of the British navy received some wounds by the capture of several British frigates; but it appears in every instance they were outmatched by the Americans, both in numbers and weight of metal. These disasters, however, were counterbalanced by some important advantages gained by the English in Upper Canada, by an inferior force, and in some instances the number of prisoners taken exceeding the number of the victors themselves.

The suspension of hostilities which took place in Germany afforded an opportunity to Buonaparte to make an effort to regain a footing in Spain. Soult was dispatched to re-organize the beaten army of Joseph, and this object was effected with a promptitude altogether suprising. On the 13th of July he took the command of the army of Spain, consisting of ten divisions of infantry, and two of cavalry; with a large train of artillery. With a great part of this force he attacked, on the 25th, General Byng's division of the British army, posted at Roncesvalles; but being supported by General Cole's division, it was enabled to maintain itself throughout the day; but the position being turned by the enemy, General Cole withdrew in the night, and returned to Zubiri. On the same day the position of Sir R. Hill, in the Puerto Maya, was attacked by a considerable force; but though it might have been maintained, General Hill, hearing of General Cole's intention to retire, deemed it expedient to withdraw likewise. These divisions were engaged with a very superior force of the enemy for seven hours, during which the enemy obtained no advantage in the field; all the regiments charged with the bayonet. Lord Wellington, on hearing of these occurrences, hastened to the scene of action, and on the 27th concentrated his army near Huarte, between Pamplona and Roncesvalles.

On that day the enemy attacked a hill which was occupied by a division of our troops, and renewed the attack with fresh troops on the succeeding day, but were foiled in every attempt to dispossess them of it. On the 28th a great part of both armies were engaged in a succession of severe contests, for the possession of important eminences ; and with uniform success on the part of the British, except in one instance, when an overpowering force of the enemy obtained the momentary possession of a hill ; from which, however, they were speedily driven at the point of the bayonet, with immense loss. The battle was fought with great fury on both sides, and several of our regiments had to charge the enemy no less than four times in the course of it. On the 29th the enemy attempted to turn the left of our army, by sending a considerable force to attack the corps of Sir R. Hill. But while he was engaged in this operation, Lord Wellington adopted the determination of endeavouring to turn both his flanks at the same time, and then to make a vigorous attack on the front of his main position. These bold and decisive measures were crowned with success, and the enemy were obliged to abandon a position, which, Lord Wellington observed, " is one of the strongest and most difficult of access that I have yet seen occupied by troops ;" and in the retreat they lost a great number of prisoners. While Lord Wellington was engaged in conducting this operation, General Hill was pressed by the force which was detached to turn his left. Reinforcements, however, were sent to him, which enabled him to maintain his post until the success of the main contest was no longer dubious, and the enemy were put to the rout. Lord Wellington closely pursued the retreating enemy till sunset, when he found himself between that division of the French which had attacked Sir R. Hill and their main army. This body, however, extricated itself from its perilous situation in the course of the night, and retired through the pass of Donna Maria, where two divisions were placed to cover their retreat. On the 31st this pass was attacked and carried, notwithstanding the vigorous resistance of the enemy, and the strength of their position ; and a large convoy going to the French army was taken, with many prisoners. On the 1st of August the pursuit of the enemy was continued, and many prisoners made. On the 2nd the enemy's main army was found posted behind the Puerto de Echalar, two of their divisions occupying the Puerto. These were attacked by a single brigade of our troops, under General Barnes,

and were actually driven, notwithstanding a strong resistance, from these formidable heights. On the 4th of August Lord Wellington observes, "there is now no enemy in the field within this part of the Spanish frontier." The loss of the allies in these different actions amounted to about 900 killed, 500 wounded, and 700 missing. The loss of the enemy was supposed to exceed 15,000, of whom the prisoners amounted to 4000.

Previously to these engagements a practicable breach had been made in the wall of the fort of St. Sebastian; and on the 25th of July an attempt to carry the place by storm entirely failed. On the 25th of August, however, the fire was re-opened; on the 31st the place was stormed and carried, the garrison retiring into the castle; and on the 8th of September, a few hours after the batteries had been opened against it, the castle surrendered by capitulation, the garrison becoming prisoners of the war. On the 7th of October the allied army crossed the Bidasoa, and established itself in France. On the 31st Pamplona surrendered to the Spanish force which blockaded it; and the following winter was employed by the French in frequent attacks on the posts of the allies, in which they were uniformly driven off with loss. By this train of almost exampled successes, in the face of a vigilant and powerful enemy, did the British commander prove the imbecility of those threats which had been so vauntingly thrown out by the ambitious ruler of France. The English, who, in his own boasting language, were long ago to have been *driven into the sea*, now planted their victorious banners on his own territory, striking at the basis of that throne which he so disgracefully occupied.

But we must now turn our attention to the affairs in the north of Europe. On the 8th of August the armistice, which had arrested the course of hostilities between the allied powers in Germany and France, was denounced by the former, and on the 17th hostilities were resumed. Sweden had already joined the confederacy, and Bernadotte, the Crown Prince, formerly a general of France, was advancing towards the scene of action with a numerous army. Added to this, on the 11th, war was declared by Austria against France; and her armies immediately united themselves to those of Russia, Prussia, and Sweden.

During the continuance of the armistice immense preparations had been made on both sides for opening the campaign with effect. The main French army, under Buonaparte in person, occupied Dresden and its vicinity; while the main

body of the allied army, accompanied by the emperors of Austria and Russia, and the King of Prussia, and placed under the general command of Prince Schwarzenberg, was posted near the confines of Bohemia, between Prague and Dresden. General Moreau was placed at the head of the Russian staff, and is believed to have been chiefly instrumental in framing the plan of operations. Berlin was the head quarters of Bernadotte, Crown Prince of Sweden; and under him was placed a large Prussian, Swedish, and Russian force. An intermediate army, under the Prussian General Blucher, covered Silesia. Both Bernadotte's and Blucher's armies were opposed by masses of French force, under Davoust, Oudinot, Ney, Macdonald, &c. The plan of the allies was to advance simultaneously from all parts of this extensive line, making their main attack from the side of Bohemia, on the enemy's flank at Dresden; while Blucher threatened them in front, and Bernadotte kept them in check on the side of Berlin. Buonaparte's plan appears to have been to force Blucher's line, and then to operate on the right flank of the main allied army in Bohemia, while an attack should be made on the side of Berlin, with a view to get possession of that capital. General Blucher had advanced to Buntzlau on the 21st, the French retiring before him: he was there met by Buonaparte in person, at the head of 110,000 men. Before this superior force he slowly retired, most gallantly contesting, however, every tenable position, until he had placed himself behind the Katzbach. In the mean time the grand allied army passed the frontiers of Saxony, and advanced with about 140,000 men upon Dresden, forcing in their way the entrenched camp of the enemy at Pirna, and driving the troops which covered Dresden, after a series of sharp conflicts, within its walls. On hearing of these movements, Buonaparte made a forced march with a large division of his army, and reached Dresden just before the allies had begun to encircle it. this was on the 26th of August. The allies finding Dresden too strong for a *coup de main*, resolved to confine their operations to feigned attacks, intending to draw the French without the walls, in which case they would take advantage of such circumstances as might occur. Accordingly, on the 27th Buonaparte appeared outside the town with 130,000 men; but the weather was so very unfavourable, that the engagements consisted chiefly of a severe cannonade, which was continued during the whole of the day, and of frequent charges of cavalry. Many men

were lost on both sides ; but the event which chiefly distinguished this day was the unfortunate catastrophe which overtook General Moreau. While in earnest conversation with the Emperor of Russia both his legs were carried off by a cannon ball, the ball going through his horse. He suffered amputation with great fortitude ; after which he lived only a few days.

Buonaparte having evinced an intention of seizing the passes which led to Bohemia, on the 28th the allied army deemed it necessary, if possible, to frustrate this movement, and they therefore quitted their position before Dresden with that view. The state of the roads also made it impossible to bring up their supplies. They withdrew in perfect order ; but, before they had reached the passes, they found a large French force, under General Vandamme, in possession of one of them. Several severe actions followed. On the 30th the French were attacked in front and rear at the same time, and their complete rout was the consequence. General Vandamme and the whole of his staff, six other general officers, and about 10,000 prisoners, besides 60 pieces of cannon, six standards, and almost the whole of the equipage, were the fruits of this victory. Of the whole French force, consisting of upwards of 30,000 men, not one-third escaped, and those without arms or baggage.

When Buonaparte quitted Silesia, in order to avert the danger which threatened Dresden, he left Marshal Macdonald strongly posted near Janer, in front of General Blücher. On the 26th the marshal's position was attacked ; and after a short contest, he was driven from it, with the loss of 50 pieces of cannon, and upwards of 10,000 prisoners. On the succeeding days the enemy were pursued, and occasionally attacked with fresh vigour ; and on the 29th, when General Blücher returned to Buntzlau, 5000 more prisoners, 40 pieces of cannon, with General Pulhadt, and the staff of Macdonald, were taken.

While these events were passing in Silesia and Bohemia, the Crown Prince of Sweden was actively employed in forwarding the general objects of the war. On the 18th of August he collected 90,000 men between Berlin and Spandau, to repel the attacks which Buonaparte had directed to be made on that capital, and the plan of which the Crown Prince appears to have learned from General Jomini, the chief of Marshal Ney's staff, who came over to the allies on the 15th. He was enabled, therefore, completely to defeat

the enemy's purpose of advancing to Berlin. On the 21st, 22nd, and 23rd, of August, a part of his force was in contact with the French on the Prussian frontier, whom they forced to retreat, with the loss of twenty pieces of cannon and some prisoners. A succession of small engagements from that time to the 4th of September, during which the allies were advancing and the French retreating, put the former in possession of 8 or 9000 prisoners, and of the fortress of Luckaw. On that and the following day a part of the allied army, posted at Zalze, was attacked by the French, and obliged to retire to Jutenbock. Here the allied force, consisting of about 40,000 men, chiefly Prussians, had to sustain on the 6th the attack of 70,000 French, and 200 pieces of cannon; which they did with extraordinary heroism, until the Crown Prince, who having heard of the enemy's movements, and advanced by forced marches to their relief, appeared on the ground with 70 battalions of Russians and Swedes, 10,000 cavalry, and 150 pieces of cannon. The fate of the battle was instantly decided, and the French retreated with great precipitation, vigorously pursued by the allies. On the 6th and 7th they lost upwards of 9000 prisoners, and about as many more in killed and wounded, 50 pieces of cannon, 400 tumbrils, besides several standards. The French army, on this occasion, was commanded by Marshal Ney. Davoust was at the head of another army, composed of French and Danes, in Mecklenburg, whence it was his object either to advance into Swedish Pomerania, or to make a movement on Berlin, in conjunction with that of Marshal Ney. Being vigilantly watched, however, by a Russian and Swedish force, under General Walmoden, he was unable to effect either purpose; and retired, after sustaining some loss, on Hamburg, the Danes separating from him, and retiring on Lubeck.

The retreat of Buonaparte from Dresden soon followed, in consequence of the forward movements of the allied armies, and the reverse he had sustained. His troops, especially those of the Confederation of the Rhine, began soon to desert in great numbers. The spell by which he had bound the nations in his chain was soon broken, and a species of determined resistance to his unprincipled pursuit of personal aggrandizement was excited. Lord Wellington had the glory of first dissipating the illusory splendour which had given to his legions the character of invincibility. The deliverance of Portugal, the fall of Badajoz, the victory of Salamanca, and the important effects which

followed it, were felt at the extremity of Europe, and gave new life to the expiring hopes of the civilized world.

The month of September was employed by the allied army in approaching from all parts of their extended line, towards Leipsic as a centre, near which place it appeared that Buonaparte had resolved to collect his armies, with a view to a desperate struggle; if not to regain his superiority, which seemed now hopeless, at least to secure a retreat, to his own frontier. The armies of the Crown Prince and General Blucher had already crossed to the left bank of the Elbe, and occupied positions between that river and Leipsic; when they suddenly adopted the bold resolution of abandoning the line of the Elbe, and placing themselves with a changed front between Buonaparte and France. This resolution was accomplished; and these two armies, on the 11th of October, by a masterly manoeuvre, which seems to have both deceived and astonished their enemy, took post behind the Saale. Buonaparte quitted Dresden on the 5th of October, and moved upon Leipsic. "This movement" (the Crown Prince of Sweden observes) "which was four days too late, has been fatal to the French army, and has destroyed in two battles the spell of Napoleon's invincibility." His object, which was to attack the armies of Blucher and the Crown Prince before the arrival of the grand Austrian army on the scene of action, was frustrated by the unexpected march of the allies into the rear of his line. On this occurrence Buonaparte seemed disposed to make a diversion on the side of Berlin; but his real object was probably to draw his forces towards Magdeburg, and thus to extricate himself from the contracted and dangerous position he now held. He seized Dessau, and the works and bridge of Rosslau, by which, part of the Crown Prince's army had crossed the Elbe, raised the blockade of Wittemberg, and destroyed the bridge of Acken. These affairs have led the allied commanders to expect that he would endeavour to move through Wittemberg, along the right bank of the Elbe, on Magdeburg, they quitted their position behind the Saale, re-established the bridge of Acken, and were ready, had he persisted in this purpose, to have crossed at that place, in order to intercept his march.

Buonaparte seems at this time to have changed his plan of operations, and to have resolved on effecting his retreat to the Rhine, in the direction either of the Weser or of Mentz. On the 15th of October, therefore, he concentrated

his army in the vicinity of Leipsic. The allies regulated their movements accordingly. On that day the armies of the Crown Prince and Blucher marched on Halle; while the grand army of Bohemia, which was now in communication with them, advanced on Leipsic from the south. On the succeeding day the opposing armies came into fierce contact along the whole of their line. The battle was long and bloody, and although the advantage was clearly on the side of the allies, especially on that part where General Blucher and the Crown Prince commanded, yet it was by no means decisive: an eagle, 2000 prisoners, and 30 pieces of cannon, were there taken, and the French lost ground. The conflict which the grand Bohemian army sustained was more equal though not less severe. At the close of the day that army occupied the same ground on which the battle had commenced. On the 17th there was no fighting, although the armies lay in sight of each other. It was passed on both sides in the most anxious preparations for renewing, early on the next day, the combat which was to decide so many mighty interests—which was to break or rivet the chains of Europe. Its results was the most splendid. It is thus summed up by Sir Charles Stewart, in his dispatches:—"The collective loss of above 100 pieces of cannon, 60,000 men, an immense number of prisoners, the desertion of the whole of the Saxon army, also the Bavarian and Wirtemberg troops, consisting of artillery, cavalry, and infantry, many generals, among whom are Regnier, Valleroy, Brune, Bertrand, and Lauriston, are some of the first-fruits of this glorious day." Lord Cathcart in his dispatches observes, "Nearly half a million of soldiers fought in this battle, probably one of the most extensive and generally engaged that ever took place, at least in modern history. The presence of the sovereigns has certainly a most animating effect on their armies. This is the eighth general action, seven of them commanded by the ruler of France, in which I have seen the Emperor Alexander at the head of his army. As usual, unmindful of personal danger, he approached every column, animating the officers and men by his presence and example; and by a few energetic words, touching the chords which produce the strongest effects on the minds of Russian soldiers—confidence in the Supreme Being, resignation to his will, and obedience to their sovereign."

On the morning of the 19th the town of Leipsic, into which the enemy had retired, was attacked by a part of the

Crown Prince's army, and carried after a short but violent conflict. Buonaparte quitted it about nine o'clock, carrying with him the remains of his army; but he effected his escape with considerable difficulty, for such was the confusion of his retreat, baggage, cannon, and troops, pressing pellmell through the narrow passes that were still open to them, that they were soon choked up, and great numbers of the French were taken prisoners. More than 300 pieces of cannon, 1000 caissons, and above 15,000 prisoners, besides eagles and colours, fell into the hands of the allies, on this and the following day. The enemy abandoned the whole of his hospital establishment, with 23,000 sick and wounded. "It is inconceivable," observes the Crown Prince, "how a man, who had commanded in thirty pitched battles, and who had exalted himself by military glory in appropriating to himself that of all the old French generals, should have been capable of concentrating his army in so unfavourable a position as that in which he had placed it: the Elster and the Pleisse in his rear, a marshy ground to traverse, and only a single bridge for the passage of 100,000 men, and 3000 baggage waggons. Every one asks, Is this the great captain who had hitherto made Europe tremble?"

One of the most striking circumstances which attended the capture of Leipsic was the meeting, in the Great Square, amid the acclamations and rejoicings of the people, of the emperors of Russia and Austria, the King of Prussia, and the Crown Prince of Sweden, who had entered the town from different points, each at the head of his respective troops. The King of Saxony, his family, and all his court, were made prisoners, and were sent to Berlin.

After the battle of Leipsic the French were dreadfully harassed in their flight to Mayence. The force with which Buonaparte escaped from the field was about 80,000 men; but in his retreat from thence to the Rhine, it is probable that one half of that number were either killed or taken. Every day from the 20th to the 29th was signalized by some impetuous attack on the retreating army; the roads along which they passed were strewn with the dead and the dying; and more are supposed to have perished from fatigue than from the sword of the enemy.

On the 30th Buonaparte encountered a new and most formidable enemy. The Bavarian army, under General Wrede, having gone over to the allies, and formed a junction with a body of Austrians, directed their march on Frankfort, with a view to intercept the flight of Buona-

parte. Accordingly, when he reached Hanau, a place about four leagues from Frankfort, the allies were prepared to dispute his passage. A sanguinary engagement ensued, in which he at length cut his way through the opposing force with the loss of about 30,000 men; he then crossed the Rhine, and arrived at St. Cloud on the 9th of November. The allies immediately established their head quarters at Frankfort. On the 1st of December they issued a manifesto, in which they declared, that the first use they made of the victories which had conducted them to the banks of the Rhine, was, to offer peace to Buonaparte on terms which should secure the independence of France, and of the other states of Europe; which should even confirm to France a greater extent of territory than she had possessed under her kings. But the moderation thus expressed by the allied sovereigns did not meet with a corresponding degree of moderation in their opponent; and happily for Europe these pacific overtures were rejected. In the mean time there was no relaxation on either side of military effort, Davoust was driven, by the Crown Prince of Sweden, from the line of the Stecknitz, which he had occupied, and forced to shut himself in Hamburg, which was thus compelled to endure the rapacity of a French army, headed by a general who seemed insensible to the feelings of humanity.

But it was not the defection of Bavaria alone from the French cause which now gladdened the hearts of all the true friends to the liberty and happiness of Europe. Holland at length shook off the yoke of the usurper, and asserted her ancient title to independence. On the 15th of October the people of Amsterdam rose in a body, proclaiming the house of Orange, and their example was followed by the other towns of the provinces of Holland and Utrecht. The French authorities were dismissed, and a temporary government formed and proclaimed in the name of the Prince of Orange, until the arrival of his serene highness, to whom a deputation was sent. The deputation reached London on the 21st, and a considerable body of troops was ordered to accompany the Prince to Holland. The following proclamation, which was universally diffused in the United Provinces, will give some idea of the spirit which prevailed among the leaders of this revolution, which was effected without disorder, and almost without bloodshed:—

“Orange boven!”

“Holland is free! The allies advance upon Utrecht. The

English are invited. The French fly on all sides. The sea is open, trade revives. Party spirit has ceased. What has been suffered is forgiven and forgotten. Men of consequence and consideration are called to the government. The government invites the prince to the sovereignty. We join the allies and force the enemy to sue for peace. The people are to have a day of rejoicing at the public expense, without being allowed to plunder or commit any excess. Every one renders thanks to God. Old times are returned. *Orange boven !*"

The same spirit was also displayed in the Netherlands, which were soon in motion, while General Blucher approached Cologne, with a view to their relief. The Confederation of the Rhine was dissolved. The forts of Dantzic and Stettin, which had hitherto been in possession of the French, surrendered to the allies. Hanover was restored to its rightful sovereign, the authorities of Bremen re-established, and the whole of Germany delivered from the French yoke.

Even the States of Italy, which had sunk to the lowest state of degradation, began to arouse from their slumbers; the Venetian Republic was speedily emancipated; and so rapid was the progress of the Austrian arms, that the French were expected ere long to be forced to seek refuge beyond the Alps. The sentiments of the English nation, in view of these astonishing changes, were at this time admirably expressed in the following letter of the Earl of Aberdeen to Lord Castlereagh :

"The long sufferings of many nations are drawing to a close; the deliverance of Europe appears to be at hand. That ray of hope, for the salvation of the civilized world, which has so steadily beamed from our own happy shores, is now rapidly diffused over the whole continent. If any thing can add to our feelings of exultation, as Englishmen, at this prospect, it is the reflection, that this event is mainly attributable to the unshaken constancy and perseverance of Great Britain; and I am truly happy to state to your Lordship, that this feeling is not confined to ourselves, but is admitted and avowed by all those who are most entitled to consideration."

• The commencement of the year 1814 was occupied by all parties in fruitless attempts to negotiate a peace. On the one hand, the ambitious projects of the French ruler were too dearly cherished to allow him to admit of a peace on any other terms than the sacrifice of the liberties of Europe;

and on the other, the powers with whom these negotiations were carried on were too well convinced of the nature of his designs to hope for peace, till every conquest which his ambition had prompted him to make was entirely wrested from his grasp. The people of France were at first too much dazzled by the glory of those conquests to view them in their proper colours; and though the ancient boundaries of the empire were entered at various points by nearly half a million of men, yet it was not till their capital was in possession of the enemy that they seemed to awake to a sense of their true interest. The revolution which succeeded these movements was produced, by means the most extraordinary; and the historian of future ages will record with wonder the astonishing fact, that while almost all Europe had been laid waste and subjugated by the overruling power of France, the princes who had most suffered from it, when they in turn became victorious, and France was humbled at their feet, came but to deliver her from the tyranny which had oppressed them both.

Early in the year the combined armies, under generals Schwartzenberg and Blucher, crossed the Rhine in several points, and entered the ancient territory of France. They were in general well received by the inhabitants, and advanced without much opposition into the heart of the country. At length Buonaparte, who had considerably reinforced his army during the winter, brought a large force to bear on the corps commanded by Blucher; which forced it to retire with considerable loss, but yet in unbroken order, to Chalons. The advance of the grand army, under Schwartzenburg, recalled Buonaparte to the neighbourhood of Paris; whence, after several engagements, he obliged the allies to retire through Troyes on Bar-sur-Aube. When Buonaparte was warmly engaged with this army on the Seine and the Aube, Blucher again advanced, and defeating the corps opposed to him, appeared before Meaux, and menaced the capital. This movement compelled Buonaparte once more to intermit his offensive operations against Schwartzenberg, and leaving a large body to watch his progress, he proceeded against Blucher. No sooner had he withdrawn a part of his force for this purpose, than Schwartzenberg moved forward, and having severely beaten the corps opposed to him, repossessed himself of Troyes. His head quarters were established at this place on the 4th of March.

On the same day Buonaparte came in contact with the army of Blucher, at Soissons, whither he had retired from

Meaux, on the approach of Buonaparte in force, in order to effect a junction with the corps of Bulow and Winzengerode. The allies were in possession of the Soissons, and their army was posted in its rear. The whole of the 5th passed in a sanguinary conflict for the possession of the town. Night put an end to the contest, when the enemy withdrew. On the following day it was discovered that Buonaparte had made a movement, with a view to turn the left of the allies, and cut them off from Laon. This obliged Marshal Blucher to evacuate Soissons, and to take up a position at Laon, which he reached with his whole army on the night of the 7th, his left wing, however, having sustained a severe attack, and suffered some loss in its progress thither. On the 9th Buonaparte attacked the army of Blucher with a very great force. The battle was maintained with great obstinacy throughout the whole of that and the following days; but it ended in the complete repulse of the enemy, with the loss of 58 pieces of cannon, upwards of 6000 prisoners, and a great quantity of ammunition and baggage.

Whilst these things were passing in the north of France Lord Wellington was actively employed in the south. Between the 23rd of February and the 2nd of March he forced all the enemy's positions on the Adour, and possessed himself of their magazines at Aire and Mont de Marsan. The loss of British and Portuguese occasioned by these operations amounted to between 3 and 400 men killed, and 2400 wounded. The enemy's army was most severely beaten. They are represented in the general's dispatches as routed and dispersed, flying in the utmost confusion, throwing away their arms, and deserting in great numbers, leaving the country strewed with their dead. A part of the allied army crossed the Adour, below Bayonne, having been assisted in this operation by the boats of the blockading squadron, the crews of which had to encounter extraordinary peril as well as fatigue from the violence of the surf, in effecting this service. By this part of the army Bayonne was closely invested. The heavy rain which fell about the 1st of March, however, materially impeded the advance of the army, and Lord Wellington's head quarters were still at Aire on the 14th. The enemy's army retired along the banks of the Adour towards Tanbes, in order to effect a junction with a corps of 10,000 men of Suchet's army, which was advancing from Catalonia. Sir Rowland Hill was dispatched in pursuit of it, and a part of his force took possession of Pau, the capital of Bearne. Marshal Beresford

was detached in the opposite direction towards Bourdeaux ; and on the 12th he took possession of that important city, the second in France, not only without resistance but apparently to the universal joy of the inhabitants. The marshal was met at a short distance from the town by the civil authorities and a great body of the population, who displaced the eagles and other badges of the present usurpation, and spontaneously and universally substituted the Bourbon insignia, filling the air with shouts of "*Vivent les Bourbons ! Vivent les Anglois ! Vive Louis Dix-huit !*" This feeling seemed to prevail in every part of Bearne and Gascony which was entered by our troops. The Duke D'Angouleme also was received with enthusiasm by all ranks ; and the same feeling manifested itself in the rear of the allies in Alsace, Franche Comte, &c. where monsieur experienced the same gratifying reception.

For some days after the battle of Laon the hostile armies in the north of France were engaged chiefly in manœuvring. Buonaparte having directed his main force against the army of Prince Schwartzenberg, Blucher was enabled in the mean time to execute some important movements, which placed him in a situation effectually to co-operate with the grand army. The allied generals appear at once to have penetrated into Buonaparte's design ; and, with a boldness and decision worthy of their cause, they adopted a resolution which not only frustrated that design, but in a week put a happy period to the contest. They resolved to leave Buonaparte behind them ; and, having united the armies of Schwartzenberg and Blucher, amounting together to more than 200,000 men, to march direct to Paris. A corps of 10,000 cavalry, and 40 pieces of cannon, was left to watch Buonaparte's movement, and to harass his march. The advancing army encountered near Vitry, on the 25th of March, the corps of Marmont and Mortier, which were hastening from Paris to join Buonaparte, and drove them back with loss. On the same day an immense convoy of provisions and ammunition, escorted by 5000 men, was met near Fere-Champnoise ; and, after a gallant resistance, the whole fell into the hands of the allies. From this place the allies continued to advance rapidly on Paris, which they reached on the 29th ; the retreating corps opposing an occasional, though ineffectual resistance to their progress. The position they occupied extended from Montmaitre on the right, to the wood of Vincennes on the left. Prince Schwartzenberg addressed a proclamation to the inhabitants

of Paris, calling them to imitate the conduct of Bourdeaux, and accelerate the peace of the world, by concurring with the allies in establishing a salutary authority in France; but the flag was refused admittance. On the 30th the troops composing the garrison of Paris, with the corps of Mortier and Marmont which had joined them, posted themselves in a strong situation on the heights of Belleville. These heights, as well as the whole line of the enemy's entrenchments, were successively attacked and carried by the allied forces, but not without a sanguinary conflict. At the moment of victory, a flag of truce arrived from Paris, proposing to accept the offer previously made, but which had been refused admittance: this proposal was acceded to, and on the morning of the 31st the allies entered Paris. They entered it, however, not as conquerors but as deliverers. The Emperor of Russia and the King of Prussia were received by all ranks of the population with the loudest and most cheering acclamations; the general cry was, "*Vive l'Empereur Alexandre! Vivent les Bourbons!*" The national guards, in their uniform and armed, cleared the avenues for the troops passing through in all the pomp of military parade, the very day after they had been so severely engaged; while the people, unanimous in their cry for peace, and for a change of dynasty, enjoyed the spectacle of the entry into their capital of an invading army as a blessing and deliverance. A declaration was immediately issued by the allied sovereigns, expressing their fixed determination no more to treat with Buonaparte or any of his family; to respect the integrity of ancient France, as it existed under her legitimate kings; and to recognize and guarantee the constitution which France should adopt. The senate having been called together on the following day, a provisional government was immediately nominated by them, consisting of five members, at the head of which Talleyrand was placed; and resolutions were adopted, declaring that the dynasty of Buonaparte was at an end; that the French nation was delivered from its allegiance to him, and that the soldiers were absolved from their oaths. To the provisional government was delegated the task of preparing the plan of a constitution. On the 6th of April the plan they had prepared was presented to the senate, and it appears to have been unanimously adopted. In England, considerate people were rather startled at the sight of this constitution, the work of four days, and began to tremble lest the happiness of France was once more to be made the

sport of some new and rash experiment of political science. They soon found, however, a solution of the phenomenon of the unprecedented haste with which so great and momentous a work had been achieved, as well as some abatement of their alarms, in the near resemblance which it bore to the British constitution. The following is a brief outline of it :

“ The government is to be a hereditary monarchy. The French people call freely to the throne of France Louis Stanislaus Xavier, brother of the last king, and the other members of the house of Bourbon in their order. The executive power belongs to the king. The king, a hereditary senate named by the king, and a legislative body elected by the people, concur in the making laws ; the king's sanction being necessary to the completion of a law. Plans of laws may originate in either house ; and the king may propose to both subjects of consideration ; but laws relating to contributions can only be proposed in the legislative body. Members of both houses are free from arrest, without a previous authority from the house to which they belong, but the trial of members of either house belongs to the senate ; and the ministers of state may be members of either house. The legislative body must be re-elected at the end of five years ; it assembles each year, of right, on the 1st of October ; but the king may adjourn or dissolve it ; in the latter case, another must be formed in three months. Taxes shall be equal, and imposed only by law ; the land tax to be fixed only for a year ; and the budget to be annually presented at the opening of the session. The law shall fix the mode and amount of recruiting for the army. The judges shall be independent, and hold their situations for life. Trial by jury, and publicity of trial in criminal matters, are preserved. The king may pardon. The penalty of confiscation of goods is abolished. The person of the king is sacred and inviolable ; all his acts are to be signed by a minister, who shall be responsible for any violation of the laws which those acts may contain. The freedom of worship and conscience are guaranteed ; the ministers of religion are treated and protected alike ; and all Frenchmen are equally admissible to civil and military offices. The liberty of the press is entire, with the exception of offences which may result from its abuse. The public debt is guaranteed, and the sale of the national domains maintained. The ancient nobility resume their titles, and the new preserve theirs hereditary. The legion o.

honour is maintained with its prerogatives. The senate is to consist of not less than 150, and not more than 200 members, whose dignity is immoveable and hereditary; the present senators form part of this number, and continue to enjoy their present endowments; the king names the rest, and supplies all vacancies. The legislative body shall be chosen immediately by the electoral bodies; and each department shall continue to send the same number of deputies as at present; the deputies shall preserve their pay: the present deputies shall continue till replaced by an election to take place for the session of 1816. The ordinary tribunals existing at present are to be preserved till altered by law. The courts of cassation, the courts of appeal, and the tribunals of the first instance, propose three candidates for each vacancy of judge; and the king chooses one of the three, and names the first presidents and public ministers of the courts and tribunals. The military on service and on half pay or pension, and their widows, preserve their rank, honours, and pay. Every person may address, by petition, every constituted authority. All the existing laws remain till legally repealed; the civil code shall be called the code of the French. The present constitution shall be submitted to the acceptance of the French people. Louis Stanislaus Xavier shall be proclaimed king as soon as he shall have signed and sworn to an act, stating his acceptance of the constitution."

The Count D'Artois, the brother of the king, who repaired to Paris soon after it was taken possession of by the allies, and was received with the most enthusiastic expressions of joy, was appointed lieutenant-general of France. He signified his brother's willingness to accept the basis of this constitution, implying that there were some of its details which required to be modified. Louis XVIII. left London on the 23rd of April, for Paris.

It is now time to turn to Buonaparte. When he discovered that the allies had adopted the bold policy of advancing at once to Paris, and had already for two or three days been pushing forward in that direction, he made an effort to repair the error he had committed, by an immediate and rapid pursuit. It was now, however, too late. Exhausted as his troops were by the fatigues they had undergone, deprived of the supplies he had relied on receiving from Paris, but which had been intercepted, disappointed of his reinforcements, and harassed by the clouds of cavalry which hung on the flank and rear of his armies, he was more than two days' march from Paris on the day on which the allies

entered it. On hearing of this event he established his head quarters at Fontainebleau, intending there to collect and re-organize his force. He soon found, however, that he could no longer rely on the support of his generals or army. He therefore transmitted a proposition to Paris, offering to abdicate in favour of his son. This invidious proposal was instantly rejected; on which he declared his entire renunciation, for himself and his heirs, of the throne of France. The moment his military power was broken, it appeared that he stood alone and unsupported in a country where a few days before he had disposed at pleasure of the lives and destinies of its inhabitants. Buonaparte selected the island of Elba as the place of his future residence. Six millions of livres annually (£250,000 sterling) were to be allowed for the support of himself and his family, including the Empress Maria Louisa, who separated herself from him.

This revolution discovered to the world more of the hideousness of Buonaparte's government than will suit the taste of his warm admirers in this country; of whom, we are sorry to say, there have been, and still are, many among us. Such was the ignorance of public events which prevailed in France, that the revolution in Holland was not known in Paris when the allies entered it. When the Bastille was forced by the populace of Paris, in 1789, seven state prisoners were found in it: the number found in Buonaparte's state prisons is said to amount to upwards of 1200. A number of Belgian priests who had for years been confined in different castles for having refused to say prayers for Napoleon, although they had made repeated acts of submission—upwards of 300 students belonging to one of the universities in Flanders, and among them 40 clergymen—were then set at liberty. A vast number of children had been forcibly taken from their parents by Buonaparte, to be educated according to his own views in his public establishments: the provisional government ordered, that parents should be allowed to reclaim their children so circumstanced. But it is needless to state all the particulars of his tyranny which these events brought to light. One of his last acts while Paris was yet in his power, was to rob the treasury of all the specie contained in it; and he afterwards augmented this fund by seizing on the public chests of several of the departments; but the provisional government issued orders for the recovery of this property.

Louis XVIII. soon after arrived in France, amid the laments of his new subjects; and a constitution was

framed, with some alterations, on the plan which had been proposed by the provisional government. Buonaparte, forlorn and almost unattended, was conducted to the island of Elba, where for some time he exhibited to the world a picture of the instability of human greatness. Yet even here he might have been comparatively happy, but for the solicitations of his darling passion, ambition. It appears, that after a few months' residence here, a correspondence was carried on between him and his partizans in France, which ended in his return thither at the head of what appeared to be an inconsiderable force. But such was the infatuation of the French people, and particularly of the army, that this enterprising adventurer marched without interruption to Paris, from whence the king had previously escaped; and for some time all ranks of people seemed to vie with each other in inviting again to the throne a man who a few months before had quitted their country in disgrace.

This counter-revolution, however, was as transitory as it was unexpected. It drew upon France the overwhelming force of the allies, which had but recently retired from it; and the results of the battle of Waterloo, which was fought in the month of June, 1815, were altogether without parallel in history, whether we consider their intrinsic magnitude, their bearing on the peace and happiness of the world, or the rapidity with which they were accomplished. The Bourbons were by it once more restored to the throne of France—Paris again in the hands of the allies—and Buonaparte at the mercy of what he himself has styled “the most powerful, the most constant, and the most generous of his enemies.”

Humanity must shudder at the prospect which bleeding Europe presents after the dreadful conflicts which have so long laid it waste; but Christianity inspires the pleasing hope, that from these desolations some glorious and happy effects will be produced. In Spain and Portugal its benevolent influences have been banished by bigotry and superstition; in France by anarchy and voluptuousness; but we hope the time is not far distant when all these shall vanish before the light of heavenly truth. While, amidst the desolation of Europe, England may rejoice that she has remained unmoved; that the prayers which have risen from millions of hearts have at length been answered; and that the weapons of hostility have been exchanged for the arts of PEACE.

THE
YOUNG MAN'S COMPANION;
OR,
YOUTH'S INSTRUCTOR.

PART VIII
BIOGRAPHY.

BIOGRAPHY.



BIOGRAPHY is a species of history, which records the lives and characters of remarkable persons. This is at once the most entertaining and instructive kind of history. It admits of all the colouring of romance, but with this very essential difference, that our passions are more keenly interested; because the characters and incidents are not only agreeable to nature, but strictly true. Few books can with more propriety be put into the hands of young persons than well written pieces of biography: which, while they exhibit the failings of individuals, serve as a beacon to caution the unwary against error; and, at the same time that they display the excellences of a particular character, point out with equal fidelity the means by which similar excellences may be attained.

As the subjects of biography are the lives of either public or private persons, many useful observations may be made from authentic accounts of those who have been eminently beneficial to society. The lives of immoral characters may serve as a warning to deter others, and especially youth, from listening to the temptations of folly and vice. Posterity should ever perpetuate the memory of those philanthropists, who have exposed their lives, or employed their faculties, in the service of their fellow-creatures. This act is but a just tribute of public gratitude, and serves to treasure up in the annals of history a multitude of virtuous examples. The love of fame is natural to the human mind; and, when properly directed, is at once productive of happiness to the individual, and general benefit to mankind. In the lives of great men, their *public* characters are principally to be regarded; the investigation of their *private* conduct may also occasionally be useful, to illustrate the influence of example; but too minute an inquiry into the foibles and infirmities of eminent men is highly illiberal, and can never be sufficiently deprecated. The best exemplification of the interesting and useful department of

biography will be found in the following selection of eminent characters in the political and literary world, taken at different periods in English history.

WOLSEY.

THOMAS WOLSEY, afterwards the famous cardinal, affords us in his life, one of the most extraordinary examples to be met with in history of the vicissitudes of human events; who being but the son of a butcher in the town of Ipswich in Suffolk, was, from that mean beginning, raised to the highest stations both in church and state. It is true, indeed, he enjoyed the advantage of a liberal education; for we find that his father observing in him an uncommon aptness to learn, sent him early to the grammar school; from whence, by means of his parents, who were people of some property, and other good friends, he was removed to, and maintained at Magdalen College, Oxford. Here he made so extraordinary a progress, that he took the degree of bachelor of arts when he was only fifteen years of age; in consequence of which he was called the boy bachelor. He was then admitted to a fellowship in the same college, and in the end nominated master of Magdalen school, where the sons of the Marquis of Dorset were placed for their education.

This was a fortunate circumstance to the new preceptor; for the marquis, sending for his sons on the succeeding Christmas, to pass the holidays at his country seat, invited the master to accompany them; and he was highly pleased with Wolsey's conversation, who to his universal knowledge added a most insinuating address. The marquis also found the young gentlemen so much improved for the short time they had been under his care, that he determined to reward such merit and diligence with some distinguished mark of approbation: and accordingly a benefice in his lordship's gift falling vacant during the recess, he bestowed it on Wolsey, which was his first ecclesiastical preferment. This was the rectory of Lymington in Somersetshire, to which he was instituted in 1500, being then in the 29th year of his age, and bursar of Magdalen College.

Wolsey quitted the university to take possession of his living; but an accident happened very soon after, which made his new situation very disagreeable to him. He was

of a free and sociable disposition while he was seeking his advancement in the world; and therefore lived upon the most free and friendly terms with his parishioners, and the neighbouring gentlemen. By some of these he was drawn to a fair at an adjacent town, where, it is said, that being intoxicated with liquor, he occasioned a disturbance; upon which Sir Amias Pawlet, a justice of the peace, who had already taken a dislike to him, set him in the stocks.

This indignity, so dishonourable to a clergyman, Wolsey had it not in his power to resent at the time; but he neither forgot nor forgave it; for when he came to be Lord High Chancellor of England, he sent for Sir Amias to London, and sharply reprimanded him for his former indecent and disrespectful behaviour towards a clergyman, and a person to whom, as a pastor, he owed obedience. He also ordered him, on no account, to presume to quit the capital, without a licence first obtained: in consequence of which prohibition, that gentleman continued in the Middle Temple no less than six years, though he endeavoured, by many little acts of adulation and submission, to soften the chancellor's anger.

But to return to the thread of our narrative. This mortifying accident gave Wolsey a distaste to Lymington; and the death of his patron, the Marquis of Dorset, which happened shortly after, finally determined him to leave it. The next situation we find him in is that of chaplain to Dr. Dean, Archbishop of Canterbury; a station to which, the author of the *British Antiquities* is inclined to think, Wolsey recommended himself by his own assiduity, rather than by the interest of others. Here he grew greatly in favour with the archbishop, and by this means the name of Wolsey was for the first time mentioned at the court of Rome. The pope, at the archbishop's request, granted his chaplain a dispensation to hold two benefices. However, this was the greatest advantage Wolsey reaped from his connection with Dr. Dean, who died in 1503; so that he was again obliged to look out for another patron.

A man of true genius, and proportionable industry, is seldom disappointed in any views on which he employs the whole strength of his understanding. Wolsey found in himself a particular inclination to a court life; and, from several of his expressions, it should seem as if he had been possessed with a notion of the grandeur which awaited him in that sphere; for he used to say, "If he could but set one foot in the court, he would soon introduce his whole

body." With this view he studiously attached himself to persons in power ; and having, during his residence in the west of England, contracted an acquaintance with Sir John Nephant, who, at the time of Archbishop Dean's death, was treasurer of Calais, and a great favourite of Henry VII. he thought he could not do better than offer his service to him ; and Sir John being about this time on his departure for Calais, appointed him to be his chaplain, and took him over to France as one of his family. In this situation Wolsey so effectually insinuated himself into the good graces of his new master, that Sir John committed to his care the entire charge and management of his office ; in the administration of which he gave such satisfaction, not only to the treasurer, but to all persons who had any business to transact with him, that when Sir John obtained leave to resign, on account of his great age, and returned to England, he recommended Wolsey in such strong terms to the king, that he put him upon the list of royal chaplains.

Thus Wolsey at last cast anchor in his desired port ; and he did not scruple to say, that there were no advantages, however great, which he did not expect in consequence of that event. But as he knew that a bare settlement at court was not sufficient to secure a man's future fortune, without a peculiar interest among the courtiers, he enquired out those who were most acceptable to the king ; and paid his devoirs with such success to Fox, Bishop of Winchester, and Sir Thomas Lovel, the then reigning favourites, that they soon recommended him to the king, to perform a secret service, which gave him a fair opportunity to display his great political abilities, which was the basis of his future promotions.

In the year 1508, the king having resolved to enter into a secret negotiation with the Emperor Maximilian, who then resided at Bruges in Flanders, in order to settle some points previous to his intended marriage with Margaret, Duchess Dowager of Savoy, the emperor's only daughter ; it put him upon enquiring for a proper person to entrust with this private embassy ; and Wolsey was no sooner mentioned by Fox and Lovel, as one excellently qualified to perform the service Henry required, than the king commanded him immediately to be sent for. After some private discourse, being fully satisfied of his capacity, Wolsey's dispatches were ordered ; and on the Sunday following, at four o'clock in the afternoon, he set forward from Richmond, at which place Henry VII. then kept his court.

But how was Henry surprised, in less than three days after, to see Wolsey present himself before him ! Supposing that he had protracted his departure, he at first began to reprove him for the dilatory execution of his orders ; but Wolsey informed him (as was really the case, through many favourable circumstances which concurred in expediting his journey) that he was just returned from Bruges, and had successfully settled the negotiation with which he was charged. “ Ay ! ” said the king ; “ but, on second thoughts, I found somewhat had been omitted in your instructions, and I sent a messenger after you with fuller powers.” To which Wolsey replied, “ That he had indeed met the messenger on the road in his return, and received the powers his majesty mentioned : but having, during his stay at the imperial court, preconceived the purport of them, and the close connection that business bore with his majesty’s service, he had presumed, on his own authority, to rectify what he considered as a mistake in his commission, and humbly implored pardon for daring to exceed it.”

Henry was so well pleased with this expedient, and still more so with the success of the negotiation, that he thanked him, declared in council he was a man fit to be entrusted with the management of affairs of importance, and rewarded him with the deanery of Lincoln, and the prebends of Walton Brinhold and Stow. These preferments enabled him to resign the living of Lymington : and to complete his good fortune, his graceful and eloquent relation of the particulars of his late embassy, before the council, attracted the notice of the Prince of Wales, who grew very fond of his company.

In 1509 Henry VII. died, and was succeeded by his son Henry VIII. who at his accession was only eighteen years of age. A more favourable event could not possibly have happened for Wolsey ; his firm friend, Fox, Bishop of Winchester, having now a motive of interest as well as affection to induce him to forward his promotion. The influence which Fox had maintained in the cabinet, during the late reign, gave way to the ascendancy acquired over the young king by the Earl of Surry : the crafty prelate introduced Wolsey to a great familiarity with his new master, in the double view of opposing his rival, and of supporting his interest in the cabinet by acting under him. In consequence of this plan, in the first year of the reign of Henry VIII. Wolsey was appointed the king’s almoner : and upon the conviction of Sir Richard Empson, one of

the corrupt judges in the late reign, the king gave him that rapacious minister's house, near his own palace of Bridewell, in Fleet Street, with several lands and tenements appertaining to the forfeited estate. The following year, 1510, he was admitted of the king's privy council, made reporter of the proceedings in the star-chamber, canon of Windsor, and register of the order of the garter. Thus firmly seated, he soon convinced his patron that he had mistaken his character ; for he totally supplanted both Surry and Fox in the king's favour.

In the year 1513 Wolsey gave such a striking proof of his extensive capacity in the management of state affairs, even in the military department, that Henry from that time placed an unlimited confidence in his new minister. A war with France having been resolved upon in council, the king determined to invade that kingdom in person, and committed to Wolsey the care of furnishing and providing the formidable fleet and army employed upon that occasion ; and Wolsey, though the task to him was new, and to any one must have been difficult, took it upon him without repining, to shew that he would not scruple his sovereign's commands in any thing.

Henry arrived at Calais on the 30th of June, 1514, accompanied by the principal officers of his court and his favourite Wolsey. The greatest part of his army had landed before him, and were laying siege to Terouenne, a town situate on the frontiers of Picardy. The king soon joined them ; and during the siege the Emperor Maximilian arrived in the English camp, with a considerable reinforcement, entered into Henry's service, wearing the cross of St. George, and received one hundred crowns daily for his pay. Soon after, the English fell in with a convoy of provisions and ammunition for the use of the besieged ; and these being attacked, a general engagement ensued, when the French were totally defeated by Henry and the emperor. The consternation of the French was so great, that they fled with the utmost precipitation ; and the cavalry making more use of their spurs than of their swords, this engagement was called *the battle of the spurs*. Terouenne surrendered in consequence of this victory ; Henry entered it in triumph, and delivered it up to Maximilian, who ordered the walls to be razed to the foundation, that the dominions of his grandson, Charles of Austria, might not be exposed to insults from the garrison of this fortress.

Henry then laid siege to Tournay, which capitulated in a

few days ; and the bishop refusing to take the oath of allegiance to the English sovereign, the bishopric was given by the king to Wolsey, who held it five years ; and when the city was restored to France he obtained an annual pension from the French king in lieu of the bishopric.

Soon after the surrender of Tournay, Henry concluded a new treaty with the emperor, which was ratified at Lisle. He then embarked for England, where he arrived in October, after a most glorious campaign ; and in the following year Wolsey was promoted first to the see of Lincoln, and then to the archbishopric of York, on the death of Cardinal Bainbridge.

It was a master-stroke of policy in our artful prelate, that while he secretly directed all public councils, he still pretended a blind submission to the royal will ; by that means concealing from his sovereign, whose imperious temper would otherwise have ill brooked a director, the absolute power he was gaining over him. And Henry, in nothing more violent than his attachments while they lasted, thought he could never sufficiently reward a man so entirely devoted to his pleasure and service. In consequence of this Wolsey held at one time such a multitude of preferments, as no churchman besides himself was ever endowed with. He was even suffered to unite with the see of York the bishoprics of Durham and Winchester, and the rich abbey of St. Alban's. And now the pope observing the daily progress he made in the king's favour, and that in fact he governed the nation, being desirous of engaging so powerful a minister in the interest of the apostolic see, to complete his exaltation at once, created him a cardinal in 1515, under the title of Cardinal of St. Cecile beyond the Tiber.

The grandeur which Wolsey assumed upon this new acquisition of dignity is hardly to be paralleled. The splendour of his equipage, and costliness of his apparel, exceeded all description. He caused his cardinal's hat to be borne aloft by a person of rank ; and when he came to the king's chapel, would permit it to be laid on no place but the altar. A priest, the tallest and most comely he could find, carried before him a pillar of silver, on the top of which was placed a cross ; but not content with this parade, to which he thought himself entitled as a cardinal, he provided another priest of equal stature and beauty, who marched along bearing the cross of York, even in the diocese of Canterbury, contrary to the ancient rule and agreement between

those rival metropolitans. The people indeed made merry with the cardinal's ostentation upon this occasion; and said, they were now sensible that one cross alone was not sufficient for the expiation of his offences. But Warham, Chancellor and Archbishop of Canterbury, having frequently remonstrated against this affront to no purpose, chose rather to retire from public employment than wage an unequal contest with the haughty cardinal. He resigned his office of chancellor therefore, and the seals were immediately entrusted to Wolsey, who, upon this new promotion, added to his former parade, four footmen carrying gilt pole-axes, a gentleman to carry the great seal before him, and an additional train of attendants, who rode on horseback; but the chancellor himself was mounted upon a mule, caparisoned with crimson velvet. In this state he resorted every Sunday to the court at Greenwich, from York House, now Whitehall.

The cardinal was now building himself a very magnificent palace at Hampton Court, whither sometimes he retired, as well to mark the progress of the work as to procure a short recess from the fatigues of his business, which at that time were very great; considering that, over and above what immediately related to his archbishopric, and his place of chancellor, he had all the affairs of the nation on his hands; yet the public tranquillity was so well established, and the general administration of justice through his means so exact, that ease and plenty blessed the land in a manner unknown for many preceding reigns. This happy disposition at home led Henry, in the year 1520, to give way to the solicitations of Francis I. King of France, and he consented to an interview with that monarchy, which was to be between Guienne and Ardres; the kings, by mutual consent, committing the regulation of the ceremonial to the cardinal's direction.

The occasion of this interview was the death of Maximilian, which happened the preceding year; and the kings of France and Spain being competitors for the imperial throne, separately paid their court to Wolsey, to engage his master in their interest; and the politic Wolsey encouraged both, receiving from them very rich presents and pensions. These rivals were Francis I. and the famous Charles V. who was elected emperor; and who having other grounds for a rupture with Francis, came over to England privately after his election, by the cardinal's connivance, to divert Henry from this famous interview. Charles met the king at Dover

but all he could obtain was a promise from Henry that nothing should be transacted between him and the King of France prejudicial to his interest. The cardinal was now caressed and flattered by most of the powers of Europe: the senate of Venice in particular addressed him in a letter, in which they felicitated him on a fortunate management of an affair that required the most consummate prudence; the pope too gave him very strong testimonies of his approbation, granting him a yearly pension of 2000 ducats, and constituting him perpetual administrator of the bishopric of Bajadox.

By these extensive subsidies from foreign courts, and the unlimited munificence of his own sovereign, who was continually loading him with spiritual and temporal monopolies, Wolsey's income is reported to have fallen little short of the revenues of the crown of England. This was a circumstance sufficient to raise the ambition of a man naturally so aspiring as the cardinal to any height.

Upon the death of Pope Leo X. in 1520, he thought of nothing less than being possessed of St. Peter's chair, and immediately dispatched a secretary with proper instructions to Rome; at the same time writing to the emperor and the king of France, to assure them, that if he was elected supreme pontiff, they should meet with such friendly and equitable treatment as they could expect from no other quarter. The former of these princes, indeed, was bound by promises which he had repeatedly given him, to assist Wolsey in procuring the papacy; but before the messenger arrived at Rome the election was over, and Adrian, Bishop of Tortosa, who had been the emperor's tutor, was chosen, though Wolsey, upon different scrutinies, had nine, twelve, and nineteen voices.

The pride and ostentation of the cardinal, together with his unbounded power, had raised him many powerful enemies, especially amongst the nobility, whom he effected to treat with arrogance and contempt. This behaviour was openly resented by Edward Stafford, Duke of Buckingham, the only courtier who ventured to oppose him. Wolsey therefore resolved to sacrifice this great man, whose discontent he apprehended might have some effect upon the king. The Duke of Buckingham was one of the greatest subjects of the kingdom, highly in favour with the people, and in possession of a post which gave him a power of controlling the actions even of the sovereign. He was hereditary high constable of England, an office which was abolished at his

death, and perhaps was one cause of hastening it, for Henry had often expressed his jealousy of Buckingham's official authority. Indeed, the ceremonial observed by the high constable at the coronation had been very disgusting to this arbitrary prince. It was customary for the constable to receive a sword from our kings, which holding in his hand, he pronounced aloud, "With this sword I will defend thee against all thine enemies, if thou governest according to law; and with this sword I and the people of England will depose thee, if thou breakest thy coronation oath." The duke having let fall some imprudent expressions in private company, that if the king should die without issue, he would lay claim to the crown, as the descendent of Anne of Gloucester, granddaughter to Edward III. in which case he would punish Wolsey according to his demerits; the cardinal by his spies obtained farther intelligence, from the duke's domestics, of his corresponding with one Hopkins, a monk and pretended prophet, who had given him hopes of succeeding to the crown. This indiscretion, combining with the nature of his office, and his public disapprobation of the favourite, revived Henry's suspicions, and prevented him from discovering that the duke was a devoted victim to the cardinal's resentment. Wolsey having collected materials for an impeachment, and deprived the duke of his two principal friends, the Earl of Northumberland, his father-in-law, whom he had committed to the Tower on a slight pretext, and the Earl of Surry, his son-in-law, whom he had sent governor to Ireland; he caused him to be arrested and accused of high treason, of which being convicted by a very thin and partial house of peers, he was beheaded on the 13th of May. From this moment Wolsey lost the little remaining credit he had with the people of England, who openly libelled him for this act of tyrannic cruelty. The emperor, upon hearing of the duke's death, said, "that the butcher's dog had worried the fairest hart in England."

After this period, the emperor and the French being at variance, made Henry the umpire to decide their quarrel. Upon this occasion, the king sent Wolsey in quality of mediator, in his name, and vested with full power to treat with the plenipotentiaries of the contending princes at Calais. The conferences were opened on the 4th of August; but Wolsey countenanced the emperor in such unreasonable demands, that the French ministers rejected them; and Wolsey then paid a visit to the emperor at Bruges, where he was received with all the honours due to royalty, and

concluded an offensive alliance. in his master's name, with the emperor against France. Henry, by this treaty, promised to invade France the following summer with 400,000 men, and betrothed to the emperor the Princess Mary, his only child. If any thing could have disgraced the cardinal at this time this extravagant alliance must have effected it being not only contrary to the true interests of the kingdom, but having a tendency to render it dependent on the emperor, by his marrying the heiress of the crown. War was declared against France in 1522, and this shameful treaty proved in the end one cause of the cardinal's disgrace: for, in order to maintain the incidental charges of the war, the king, by the advice of Wolsey, exacted a general loan from his subjects, amounting to one-tenth of the effects of the laity, and one-fourth of those of the clergy; which, says Rapin, excited general clamours against the cardinal throughout the kingdom; but, on the tax being more gently levied than it was at first intended, the storm blew over for the present, though another event occasioned some fruitless complaints against him.

Among other branches of erudition, he founded the first Greek professorship at Oxford; but, not thinking that a sufficient mark of his esteem, in the year 1525, he determined to build a college, as a lasting monument of his zeal and gratitude towards the seminary in which he had received his education; and having obtained the royal assent to commence his projected foundation, the first stone of that magnificent structure, then called Cardinal, but now Christ Church College, Oxford, was laid, with a superscription in honour of the founder; the cardinal at the same time building a grammar school at Ipswich, the place of his nativity, to qualify young scholars for admittance to it. But in the prosecution of these schemes he struck upon a dangerous rock; for having raised his college on the site of a priory, dissolved and given him by the king for that purpose, he also procured authority to suppress several monasteries in different parts of the kingdom, in order to support his new society. Indeed, the pope's bulls, which were sent over to confirm these grants, had often been a sanction for committing much greater offences: however, his seizing upon the revenues of religious houses was looked upon as sacrilege; and the king for the first time openly approving the discontent of the people against him, several satires were published reflecting on Wolsey's conduct. But it does not appear that he thought it worth his while to enquire after

any of the authors, notwithstanding Skelton, the poet-laureat, was so apprehensive, on account of some scurrilous verses of his writing, that he took refuge in the sanctuary, to avoid the cardinal's resentment.

Wolsey, however, about this time, had gained a fresh ascendancy over his sovereign by a secret tie, known only to a very few persons about the court. In the course of this year a young lady was introduced at the English court, the daughter of Sir Thomas Boleyn, or Bullen; who having been formerly in the service of the Queen of France, Henry's sister, was received by Queen Catharine as one of her maids of honour. It is said that the king no sooner saw her than he was struck with her beauty; however, his passion lay concealed for some time, and was discovered by the following accident.

The cardinal's revenue, and manner of living, in all respects equalled the state of a sovereign prince. His household consisted of eight hundred persons, many of whom were knights and gentlemen, and even some of the nobility fixed their children in his family as a place of education, suffering them to bear offices as his domestics. Among these was the Earl of Northumberland, whose son, the Lord Percy, frequently attending the cardinal to court, had there an opportunity of conversing with the ladies; and he addressed Mrs. Boleyn in particular with so much persuasive eloquence that in the end he gained her affections, and they were privately affianced to each other. Yet was not their amour conducted so secretly but it came to the king's ears. The violence of his temper immediately broke out; he ordered Wolsey to send for the Earl of Northumberland; and the young nobleman being severely rebuked by his father for the indiscretion he had been guilty of, the affair ended in a formal dissolution of the contract, the marriage of Lord Percy to a daughter of the Earl of Shrewsbury, and the dismissal of Anne Boleyn from court to her relations in the country. But the impetuosity of the king's passion daily increasing, he could not long bear her out of his sight; she was therefore recalled from her banishment; but, prior to that event, a remarkable circumstance happened, which gave rise to the subsequent proceeding in relation to the divorce, and was another cause of Wolsey's disgrace.

In the year 1527 ambassadors came from France, in order to conclude several treaties between Henry, who had abandoned the emperor's party, and the French king, one

of which was, that Francis, or his son the Duke of Orleans, should espouse the Princess Mary, Henry's only daughter. The commissioners met several times, and adjusted all points to mutual satisfaction; but in proceeding upon this article some dispute arose. The Bishop of Tarboe, one of the French king's plenipotentiaries, said, "he could not help having some doubts about the Princess Mary's legitimacy, on account of her being the daughter of Queen Catharine, who had formerly been married to Prince Arthur;" and in short, he gave broad hints, that the king had committed an unlawful act in marrying his brother's widow. Whether this objection was started by previous agreement, in order to serve the king's secret purpose, we cannot say; however, it is certain he made a handle of it, to excuse his subsequent proceedings; and from this time, openly avowing his affections to Anne Boleyn, the courtiers worshipped her as the rising sun, through whose influence alone the royal favour was to be raised and cultivated.

Wolsey could not be blind to the progress this fair favourite was making in his master's heart; though in all probability he at first thought the king meant no more than to have an intrigue with her, with respect to which kind of intercourse, it is well known his eminency entertained not the most evangelical notions. He bowed with the crowd, therefore, and left nothing untried that might engage the new mistress to his interest. But when he found by some words his majesty let fall, that not being able to obtain the favours he sought from her on any other terms than those of wedlock, he was determined at all events to gratify his passion; there was no argument possible to divert the king from his intention that the cardinal did not use; nay, he often repeated his prayers and entreaties on his knees. But his zeal was far from being pleasing to Henry, who could not bear any thing like restraint; and his opposition to her advancement may also account for the ill will Anne Boleyn afterwards bore the cardinal; though, upon her second appearance in the royal family, she for some time carried it very fairly towards him, and wrote him several kind and respectful letters, which are yet to be seen under her own hand.

It is not to be wondered at, that the cardinal's secret enemies at court should embrace so favourable an opportunity as this appeared, to undermine a man whom they durst not openly attack; for it was dangerous meddling with Henry where his prepossessions were to be removed. They pitched

upon Anne Bolyen therefore (whose aversion to Wolsey they were not unacquainted with) as the properest engine to work with ; and an occasion offering shortly after to remove the minister at a distance from the king, they took care to improve that advantage as the most necessary measure for promoting the success of their designs. This year the wars in Italy had been carried to great extremity. The city of Rome was sacked by German soldiers ; and Clement VII. was actually in captivity to the emperor. Both Henry and his premier expressed great uneasiness at this disaster ; and the cardinal having distinguished himself in several embassies to foreign princes, his foes in the council proposed that he should be sent ambassador at the present critical juncture in order to induce the court of France to mediate for the pope's release, Francis I. having made his peace with the emperor, as well as to settle some other matters more immediately relative to the state of the nation.

Whether Wolsey was aware of the plot laid against him, is not certain. He had undoubtedly an eager desire to serve the Roman pontiff ; and perhaps thought himself too firmly riveted in his master's esteem to be shaken by the cabals of a faction. Be this as it may, on the 11th of July he left London, with a numerous and splendid retinue ; the furniture of the mule on which he himself rode being richly embroidered, with bits and stirrups of massy gold. But to give a circumstantial account of this transaction would afford very little entertainment to the reader, who may find it at large in all our English histories ; we shall only observe therefore, that the cardinal at this time concluded a most advantageous treaty with France ; that he was entertained on the continent with a magnificence hardly to be paralleled ; and that, having staid on his embassy about two months, he returned home, where, in spite of the endeavours of his enemies in his absence, he was received by the king with the warmest marks of esteem and approbation.

After this embassy, the king's attachment to him seemed to increase ; for besides acknowledging the great service the cardinal had done in that affair, in a letter under the royal hand and seal, he was pleased to appoint a public thanksgiving on the occasion, going himself with his queen, and great numbers of the nobility and gentry, to St. Paul's church ; and afterwards in grand procession to dine with the cardinal. It was in consequence of this embassy also that he bestowed on Wolsey the rich bishopric of Win-

chester; and upon the sickness of Clement VII. the cardinal endeavouring a third time for the triple crown, he recommended him so strenuously, that there is hardly any doubt to be made of the king's serious inclination to raise him to the popedom; and had not his holiness unexpectedly recovered, it is highly probable he would at this time have enjoyed the object of his wishes.

In the same year that Wolsey went to France, and not many weeks after his return, the French king sent ambassadors to Henry, in order to ratify the treaties made between the two crowns. On this occasion Wolsey took upon him to regulate the reception given to the foreigners; and certainly, if we may credit the report of Cavendish, who was an eye witness to all that passed during their stay in England, these ambassadors were entertained with a cost and sumptuousness utterly unknown to modern times.

But nothing more plainly shews the good terms on which Wolsey stood with his master, after his last return from France, than the frequent visits Henry paid him at his palace at Hampton Court, which in the year 1528 was completely finished, and elegantly furnished. His majesty was greatly taken both with the situation and beauty of the edifice. Upon this Wolsey very generously made him a present of it; and the king, highly pleased with the gift, gave him in return his royal palace of Richmond.

Thus we have conducted Wolsey from his birth to the utmost summit of his fortune; we must now follow him again down the hill, in which, as it generally happens, his progress was much more rapid than his going up, even expeditious as was his ascent.

Queen Catherine's years, added to her temper, which was naturally grave, made her now become more distasteful than ever to King Henry. His passion for Anne Boleyn too, who finding the love he had for her, managed her attractions with the utmost art of coquetry, was greatly augmented; so that fluctuating between the thoughts of a mistress and a wife, Henry was so entangled, that, rather than be disappointed of the one, he resolved to rid himself of the other. Cardinal Wolsey saw it was in vain to put this notion out of his head; not caring, therefore, to engage too far in so weighty a business alone, he, with the king's permission, by his own legantine authority, issued writs to summon all the bishops, with the most learned men of both universities, to consult on his majesty's case. But these counsellors thinking the point too nice for them to deter-

mine, in the end the pope was applied to, who, in compliance with the king's request, sent Cardinal Campeggio into England, that he might, in conjunction with Wolsey, sit in judgment, and decide whether Henry's marriage with Catherine was lawful or not. But, first, the king called an assembly of all the great men in the kingdom, both spiritual and temporal, besides others of inferior degree, "and made them a speech, in which he endeavoured to account for and excuse the proceedings he was going upon, laying the greatest stress upon conscience, and the dreadful horrors of mind he had suffered ever since the French ambassadors had questioned the lady Mary's legitimacy, which made him fear that a marriage with his brother's relict was by divine law prohibited. However, he said, he submitted every thing to the wisdom of the pope's legates, who were authorized by his holiness to determine this important cause: and the measures he was already determined to take being thus artfully prepared, the legantine court was opened on the 21st of June following.

The queen, being a woman of resolute mind, protested against the legates, as incompetent judges: she appealed to the king for her conjugal fidelity, went out of the court, and would never return to it more. The legates went on according to the forms of law, though the queen appealed from them to the pope, and excepted both to the place, to the judges, and to her lawyers. The king would not suffer the cause to be removed to Rome, and Campeggio left England. But these incidents happened in a regular series; and many attempts were made to bring the queen to an easy compliance with his majesty's pleasure, though in vain. Hence it followed that the public was divided; some pitied Henry, but more had compassion for Catharine; and as Wolsey had now brought himself by his pride into universal odium with the people, while the abettors of the divorce charged all the difficulties laid in its way to his artifice, the partizans on the other side were as unanimous in condemning him for prompting his master to so iniquitous a piece of violence. But of this last charge the cardinal fully cleared himself, by calling on King Henry in open court to witness to his innocence; when the king declared, he had always advised him against it, which indeed he might do with a safe conscience; and for that reason he was jealous of Wolsey, being a secret agent in the protraction of the cause; for which he consigned him to destruction.

Indeed, it was apparent, on the breaking up of the court,

that Wolsey had nothing favourable to expect from that quarter; for the Duke of Suffolk by the king's direction, coming towards the bench where Wolsey and Campeggio sat, said, with a haughty tone and furious countenance, "It was never thus in England till we had cardinals among us." To which Cardinal Wolsey soberly replied, "Sir, of all men in this realm you have the least cause to dispraise cardinals; for if I, poor cardinal, had not been, you would not at this present have had a head upon your shoulders;" alluding to the Duke's marriage with the king's sister, which at first greatly incensed Henry.

On the removal of his cause to Rome, the king was not only enraged, but afflicted: and Hall, Stow, Rapin, and Burnet affirm, that he resolved on a progress into the country, thereby to dispel his melancholy. For that end he set out attended by his royal retinue; and coming to Grafton, in Northamptonshire, he was there attended by Wolsey and Campeggio, the latter of whom came to take his leave before he returned into Italy. This was on a Sunday; and there were many wagers laid among the courtiers, that the king would not speak to Cardinal Wolsey. But here his foes were disappointed; the king not only spoke to him, but received him with a smiling countenance; and having talked to him sometime aside at the window, he said, "Go to your dinner, and take my lord cardinal to keep you company, and after dinner I will talk to you farther." With which words Henry retired to dine with Anne Boleyn, who was with him in his progress; and the cardinals sat down at a table prepared in the presence-chamber for them and other lords. There is something curious in the account which Cavendish gives us, from one of the persons who waited at table, of the king and his mistress's discourse at dinner. It referred to Wolsey; and Anne Boleyn being as angry as she durst at the king's gracious behaviour to him, she said, "Sir, is it not a marvellous thing to see into what great debt and danger he hath brought you with all your subjects?"—"How so?" replied the king. "Forsooth," said she, "there is not a man in all your realm in England to whom he hath not indebted you." Which words she spoke, because the king had formerly, through the cardinal's advice, raised money on the people by way of loan, which had been a very unpopular measure. But the king exculpated his minister, by saying "Well, well, for that matter there was no blame in him for I know it better than you or any one else." "Nay, but," cried the lady, "besides that, what exploits hath he wrought

in several parts of this realm ! There is never a nobleman, but, if he had done as much as he hath done, were well worthy to lose his head ; nay, if my lord of Norfolk, my lord of Suffolk, or my father, had done much less, they would have lost their heads ere this."—"Then, I perceive," said the king, "you are none of my lord cardinal's friends."—"Why, Sir," answered she, "I have no cause, nor any that love you ; no more hath your grace, if you did well consider his indirect and unlawful doings." During this conversation in the king's chamber, the cardinal was not treated with much less asperity by the Duke of Norfolk without ; so that every hand appeared ready to pull down a falling favourite, though the king consulted with him four hours that same evening, which vexed many. But at night when the cardinal's servants came to prepare a lodging for him, they were told there was no room ; so that his eminency was obliged to lie at the house of one Mr Empston, at some distance in the country. And in the morning, when he came to court (though he had his majesty's command to attend him over night) he found the king just ready to mount his horse, who, without taking any farther notice, coldly ordered him to consult with the lords of the council. This was contrived by Anne Boleyn, who rode out with the king ; and in order to prevent his majesty's return before the cardinal went away, she took care to provide an entertainment for him at Hanwell Park.

The king had no sooner left Wolsey in this abrupt manner than the cardinal saw his prosperity was at an end ; but he was too wise to expose himself to the raillery of the courtiers, by appearing humbled or terrified at his approaching disgrace. Immediately after dinner he set out with his colleague for London, from whence in a few days, Campeggio took his journey to Rome. But a report prevailing that in his baggage he had concealed and was carrying off, a considerable treasure belonging to Cardinal Wolsey, the custom-house officers, by the king's order, stopt him at Dover, and made so thorough a search, that the legate complained of the insult offered to his character, though to no other purpose than to receive a rebuke from the king, for daring to assume any character in his dominions without his particular licence ; so that the Italian prelate was glad to get off unmolested at any rate. As for Wolsey, though he had the king's commission for acting as legate in England, that was afterwards brought against him, among a number of other crimes, very little better founded ; and

such was the king's eagerness to begin with him, that he had scarcely patience to wait till Campeggio set sail.

It was now term-time, and Wolsey, on the first day, went to the court of chancery, in his usual state, but after that never sat there more. On the 18th of October, 1529, the dukes of Norfolk and Suffolk came to his house at Westminster, and in the king's name demanded the great seal : at the same time letting him know, that he should immediately depart to his seat at Esher. However, he told their lordships, that he held the place of chancellor by patent for life ; and that, as he received the seal from his majesty's own hands, into those alone he would deliver it. The noblemen were extremely offended at this refusal, but the chancellor was positive. However, the dukes coming again the next day with a peremptory command to the cardinal to obey his majesty without the least demur, he at last consented ; though not without some tart reflections on the conduct of the two dukes, who, with good grounds, were suspected to have the chief hand in his ruin.

The fatal business being thus commenced, the cardinal proceeded with great coolness and submission. He called all his officers before him, and had an immediate inventory taken of every thing he was worth ; and the several moveables being brought out and set in a great gallery and the chamber adjoining, he left them all for the king. Indeed, his treasury resembled that of an eastern monarch, rather than an European subject ; for, in the first place, there were set in the gallery several tables, on which were piled an infinite variety of rich stuffs, with cloths and silks of all colours and manufactures. There were a thousand pieces of Holland ; and all the hangings of his great rooms were gold and silver arras, with the most magnificent robes and coats that he had bought for the use of his two colleges at Oxford and Ipswich. But these were trifles to what was to be seen in his chambers : there were set very large tables, wholly covered with plate, a great part of which was solid gold, all the rest of his goods and furniture bearing an equal proportion ; so that it is not improbable that his known opulence was no small inducement to the persecution against him. All things thus settled, he prepared to withdraw to Esher ; but just as he was going, Sir William Gascoigne, his treasurer, came up, and told him it was rumoured abroad that he was to go directly to the Tower. To which the cardinal replied, with some dissatisfaction at Sir William's credulity and unkindness in telling him every light story, " That he

had done nothing to deserve imprisonment; but having received all he possessed of the king, it was but reasonable that he should return it to him again." He then took boat, having with him most of his servants, with some furniture and provisions, and directed his course towards Putney. Upon this occasion the Thames was crowded with spectators on both sides, and a vast number of boats appeared on the river, in hopes of seeing the cardinal carried to the Tower; and it is almost incredible to tell what joy the common people expressed on that occasion, who in prosperity followed him with applause and blessings. Being landed at Putney, he immediately mounted his mule, his servants and attendants being on horseback; but he was scarcely got to the foot of the hill, on the other side of the town, when he was overtaken by Sir John Norris, one of the gentlemen of the bed-chamber, who dismounted his horse, and saluting his eminency in his majesty's name, told him, "He was sent express to assure him, that he was as much in the king's favour as ever: that this disgrace was only to serve a turn, and please some sort of people; bidding him be of good courage, for as his majesty was able, so he was willing, to make up all his losses." The cardinal, being surprised at this joyful news, directly got off his mule, and falling upon his knees in the dirty highway, he betrayed an extravagance of transport, at the appearance of returning to favour, quite unbecoming a man. He pulled off his hat, praised the king's goodness, and embraced Sir John Norris over and over. After which, being again mounted, and riding towards Esher, as they conversed on the way, Norris pulled out a gold ring, set with a very rich stone, which he presented to the cardinal in the king's name, in token of his recovered friendship; and Wolsey, in return, taking a gold cross from about his neck, in which a piece of the holy cross (as it was said) was enclosed, bestowed it on Sir John, as a perpetual remembrance of his service. Then, bethinking himself of what would be acceptable to the king, he sent him his fool Patch, whom six of his tallest yeomen were scarcely able to conduct, so great a reluctance had he to part with his old master: with this present the king appeared very much pleased.

But after all these great promises from the king, it appears that nothing was meant by them; for the cardinal no sooner reached his retreat than he was entirely neglected, being suffered to continue there three weeks without either beds, table-cloths, or dishes to eat his meat upon; neither had he money to buy any: so that he must infallibly have

perished, had it not been for the supplies the country people sent to him. In these sad circumstances, his secretary one day told him, that he ought in conscience to consider him and his other servants, who had never forsaken him in weal or woe. "Alas! Thomas," said the cardinal, "you know I have nothing to give you nor them; which makes me both ashamed and sorry." After which, by his secretary's advice, borrowing some money of his chaplains, many of whom he had preferred to great benefices, he had all his servants called up before him, and beheld them for some time with great tenderness, whilst his silence, and the tears that ran down his cheeks, testified his inward affliction. At length, perceiving his servants also weep very plentifully, he made them a most moving speech, in which he lamented that he had not done so much for them in his prosperity as he might have done; though he excused himself by the great promptness that there might be in people to say there was no office would escape the rapacity of the cardinal. He then deplored his present situation, which had left him nothing but the bare clothes upon his back, so that he was without any means of acknowledging their services; however, he thanked them all heartily, and giving them their wages and his blessing, told them they had better provide for themselves. After this most of his servants left him, except Cavendish, who stayed about his person; and Cromwell, who went to London, to take care of his affairs there.

It was now that the cardinal began to find out, in spite of specious pretences, how little in reality the king was his friend; for, from the rigorous proceedings commenced against him at law, it was apparent, that his majesty resolved to have him at his mercy, upon the statute of premunire, though it appeared to every one, that to let this law loose upon him would be the greatest injustice, inasmuch as he was authorized by the king to execute his legantine commission: yet, at the importunity of several lords of the council, he declined pleading to the information exhibited against him, and threw himself entirely on the king's mercy, who, he said, "had a conscience to judge and understand how far he merited punishment for the matter alledged against him:" then judgment was signed. However, he received assurances from Henry that he would not proceed to the utmost rigour of the law; and soon after he had part of his goods given to him, and obtained a protection from the king; but still diligent enquiry was making

after all his estates and effects, and whenever any were found they were immediately confiscated to his majesty's use.

Henry insisted upon his signing a resignation of York House, and he was obliged to do it. He also forced him to make over by deed of gift the revenues of the bishopric of Winchester, and after all would not so much as pay his debts, nor allow him sufficient to subsist upon; so that, with one vexation or other, Wolsey was at length quite harassed out, and fell dangerously ill of a violent fever. But the cardinal's indisposition was no sooner mentioned at court, than the king expressed the greatest concern and uneasiness. He declared he would not lose him for twenty thousand pounds; ordered one of his own physicians to attend him; and being told that nothing was so likely to promote his recovery as some mark of favour from the royal hand, he not only sent him a ring with his own picture in it, from himself, but made Anne Boleyn take the gold etwée from her side, and, with many obliging expressions, entreated the cardinal's acceptance of it as a token of her esteem and affection. Yet Wolsey was no sooner up again than the prospect grew as gloomy as ever. The king dissolved both his colleges, though in the humblest and most earnest manner he besought him to spare them: and the cardinal having, in his prosperity, at a great expense, built himself a tomb, which was not finished at the time of his fall, his majesty seized that also; nor would he be prevailed on to restore it, though his old favourite begged it of him in the moving terms of "a buryingplace, which, on account of his great heaviness," he said, "he was soon likely to want." However, the king was not so inflexible to all his requests; for the cardinal representing about this time that the air of Esher was very prejudicial to his constitution, he was immediately permitted to remove to Richmond, and a sum of money was issued from the treasury to make his circumstances a little more easy.

His removal to Richmond made his friends very uneasy. They disliked such a proximity to the court, and were in continual fears lest Henry should relapse into his former attachment, and one time or other call his discarded minister again into favour. In these thoughts, they determined to move him to a greater distance; and considering his province in the north as the properest place for his future residence, they found no great difficulty in procuring an order from Henry for his immediately repairing thither. The poor

cardinal would fain have retired no farther than Winchester, but no place but Yorkshire would do; and on his being a little tardy to set out, on account of money which he waited for, and because there was no exact time fixed for his journey, the Duke of Norfolk one day meeting his secretary Cromwell, said to him, "Go, tell thy master, that unless he quickly removes towards the north, I will tear him to pieces with my teeth;" which being repeated to the cardinal, "Then," cried he, "it is time for me to be going;" and accordingly he left Richmond in a few days after, taking the road for his archiepiscopal seat at Cawood.

No sooner was he arrived and settled in this place, than he gave himself up entirely to devotion and his pastoral charge, daily distributing to the poor, and keeping an hospitable table for all comers. His custom was to visit all the little parish churches round about, in which one of his chaplains generally preached; and sometimes he condescended to dine at an honest farmer's house, where he was constantly surrounded with a great number of indigent people, whom he conversed with and relieved.

But now an accident happened, which shewed that this great man was the slave of superstition. On All Saints' Day, the cardinal being at dinner with his chaplains, Doctor Augustine, a physician, clothed with a very heavy velvet gown, in rising up pushed against the cardinal's silver cross, placed at the corner of the table, which fell so heavy upon the head of Doctor Bonner, that the blood came trickling down. Upon this the cardinal immediately retired to his chamber; and shaking his head, said, "*Malum omen*;" which he afterwards interpreted to Cavendish upon his death-bed, telling him, that "the cross represented his person; Doctor Augustine, who threw it down, his enemy, and an informer; and the chaplain being wounded, imported that his power was at an end, and death would quickly ensue." But when the Earl of Northumberland and Sir Walter Walsh arrived at Cawood to arrest the cardinal, his words were considered by weak men as a prophecy, though in fact they amounted to no more than the well-grounded apprehensions of a fallen statesman. The earl and Sir Walter were attended by a body of horse, which plainly bespoke their commission.

Alighting at the cardinal's gate, they went immediately into the hall and demanded the keys from the porter; but the man, astonished at this request, refused to deliver them without his master's order. To prevent any farther disturb

ance, therefore, they contented themselves with taking an oath from him, "That no person should go out or come in, till he received farther orders." The cardinal all this while remained ignorant of what passed below, care being taken that no one should go up to inform him: however, at last, one of the servants found means to slip by, and told his eminency that the Earl of Northumberland was in the hall. Wolsey, being then at dinner, took this for a friendly visit from his old pupil, and immediately rose from table, and went down stairs to meet the earl. He expressed his concern that he had not given him notice of a visit, that he might have given him a better reception; and taking him by the hand, led him to his apartment, the earl's gentleman following, where taking the cardinal aside to a window, while they were in conversation, Northumberland said, "My lord, I arrest you for high treason." Upon this the cardinal demanded to see his authority; but the earl refusing to shew his commission, Wolsey replied, "I will not then submit to your arrest." However, Sir Walter Walsh coming up during the debate, whom the cardinal knew, and repeating what the earl had before said, he very readily surrendered himself.

Being now in custody, Saturday was spent in packing up some of his effects, and preparing for his journey; but as soon as the country people were informed of what the earl and Walsh had been doing, they surrounded the palace, expressing the deepest concern, for he had always been the protector and friend of the poor; which gave Northumberland and the knight no little uneasiness.

On Sunday, the 1st of November, early in the morning, he proceeded on his journey towards London. As soon as he came out of the gate, the people, with great lamentation, expressed their concern, and followed him for several miles, till the cardinal desired them to depart, and be patient, for that he feared not his enemies, but entirely submitted to the will of heaven. The first night he lodged at Pomfret Abbey; the next night with the black friars at Doncaster; and the night following at Sheffield Park, where he remained eighteen days. Here he was kindly entertained by the Earl of Shrewsbury, and had great respect shewn him by the neighbouring gentlemen, who flocked in to visit him. But being one day at dinner, he was taken very ill with a sudden coldness at his stomach; which apprehending to be an oppression occasioned by wind, he immediately sent to an apothecary for some medicine to expel it, and this gave

him ease for the present. But if he was not then poisoned, as some people imagined, either by himself or others, it appears that this disorder, from whatever it originated, was the cause of his death; for he was in so languishing a condition when Sir William Kingston, the lieutenant of the Tower, came to the Earl Shrewsbury's to take him into custody, and attend him to London, that he was hardly able to walk across the chamber. This circumstance too of being put into the hands of the lieutenant of the Tower, gave a great shock to his weakened frame; for when the Earl of Shrewsbury ordered Cavendish to tell him of Kingston's arrival in the tenderest manner, that he might take it quietly, and without apprehension, the cardinal clapped his hands on his thigh, and gave a great sigh, saying, "I now see what is preparing for me." Which expression seems to destroy the idea of his having poisoned himself; as it imported a dread of public execution. However, ill and weak as he was, he left the Earl of Shrewsbury's the following morning, and by gentle progress reached another seat of his lordship's that night.

Thus he continued three days, making short journeys, by slow progress, till on the third, at night, he arrived at Leicester Abbey. Here the abbot and the whole convent came out to meet him, receiving him in the court with great reverence and respect; but the cardinal only said, "Father abbot, I am come to lay my bones among you;" and riding still on his mule, till he came to the stairs of his chamber, he with much difficulty was helped up and put to bed.

This was on Saturday, the 25th of November; and on the Monday following his illness was so far increased, that it was the general opinion of all his attendants he could not live long. On Tuesday morning early Sir William Kingston went into his room, and asked him how he had rested. The cardinal devoutly answered, "I only wait the pleasure of heaven to render my poor soul into the hands of my Creator." After this, being about the space of an hour at confession, Kingston came to him a second time; and then Wolsey, finding his dissolution very nigh, "I pray you," said he, "have me heartily recommended to his royal majesty, and beseech him, on my behalf, to call to his remembrance all matters that have passed between us from the beginning, especially with regard to his business with the queen; and then will he know in his conscience, whether I have offended him. He is a prince of a most royal carriage, and hath a princely heart; and rather than

he will miss or want any part of his will, he will endanger the one half of his kingdom. I do assure you, that I have often kneeled before him, sometimes three hours together, to persuade him from his will and appetite, but could not prevail. Had I but served God as diligently as I have served the king, he would not have given me over in my grey hairs; but this is the just reward that I must receive for my indulgent pains and study, not regarding my service to God, but only to my Prince. Therefore, let me advise you, if you be one of the privy council, as by your wisdom you are fit, take care what you put into the king's head; for you can never put it out again." Adding, after a very severe warning against the Lutherans, "Mr. Kingston, farewell; I wish all things may have good success; my time draweth on fast." Having uttered these words, his speech failed him; and he died about eight o'clock, the guards being called in to see him expire. Such was the end, on the 29th of November, 1530. of this famous prelate and statesman. After his death he was laid in an oaken coffin, with his face uncovered, that every one might be permitted to view him; and, early in the morning on St. Andrew's day, he was buried in the middle of one of the abbey chapels.

The cardinal was, as to his person, tall and comely, and very graceful in his air and manner; but he had a blemish in one of his eyes, with a view to hide which defect, he was always painted in profile.

In his ministerial character he displayed eminent abilities; and it is certain, that during his administration he rendered England formidable to all the powers of Europe. But it is as evident, that in his foreign negotiations he was often influenced by his own private views.

In prosperity, Wolsey was proud, arrogant, and haughty; in adversity, mean, abject, and cowardly. His vices were of that cast which most disgrace the sacred character of a prelate. At the same time his virtues were of the public kind; for he greatly promoted and encouraged literature; he patronized and cultivated the polite and useful arts; and he was, in general, a liberal friend to the poor.

Upon the whole, he was very great, but far from a good man.

SHAKESPEARE.

WILLIAM SHAKESPEARE, the immortal father of the British theatre, the glory of his age and of his country, was the son of Mr. John Shakespeare, and was born at Stratford-upon-Avon, in Warwickshire, in April, 1564. In the public records of that town, the family from which he was descended are mentioned as persons of good figure and fashion in that place, and of the rank of gentry. His father, who was a considerable dealer in wool, being encumbered with a large family of ten children, could afford to give his eldest son but a slender education. He had bred him at a free-school, where he acquired what Latin he was master of; but the narrowness of his circumstances, and the want of his assistance at home, forced his father to withdraw him from thence, and thereby prevented his receiving any farther advantage from scholastic instruction.

Upon his quitting the grammar school, he seems to have entirely devoted himself to that way of living which his father pursued; and, in order to settle in the world in a family manner, he thought fit to marry while he was yet very young. His wife was the daughter of one Hatchway, said to have been a substantial yeoman in the neighbourhood of Stratford.

In this kind of domestic obscurity he continued for some time, till, by an unhappy instance of misconduct, he was obliged to quit the place of his nativity, and take shelter in London; which fortunately proved the occasion of displaying his sublime genius for dramatic poetry. He had the misfortune to fall into ill company. Among these were some who made a frequent practice of deer-stealing, and who engaged him more than once in robbing a park that belonged to Sir Thomas Lucy, of Charlecot, near Stratford; for which he was prosecuted by that gentleman, as he thought, somewhat too severely; and, in order to revenge himself for this supposed ill usage, he made a ballad upon him; and this, probably the first essay of his poetry, is lost; but it is said to have been so very bitter, that it redoubled the prosecution against him to that degree, that he was obliged to leave his business and family for some time and to seek for employment in London.

This Sir Thomas Lucy was, it is said, afterwards ridiculed by Shakespeare under the well known character of Justice Shallow. It was at this time, and upon this accident, that he is said to have made his first acquaintance in the playhouse.

Concerning Shakespeare's first mean occupation at the playhouse, the following particulars have been stated. When he came to London he was without money and friends; and, being a stranger, he knew not to whom to apply, nor by what means to support himself. At that time, coaches not being in use, gentlemen were accustomed to ride on horseback to the playhouse; Shakespeare, it is said, driven to the last necessity, attended at the door, and picked up a little money by taking care of the gentlemen's horses who came to the play. He became eminent, even in that humble station, and was taken notice of for his diligence and skill in it. He had quickly more business than he himself could manage, and at last hired boys under him, who were known by the name of Shakespeare's boys. And though he soon found means of acting in his proper sphere, that of a dramatic writer, yet as long as the custom of going to the theatre on horseback continued, the waiters who held the horses retained the appellation of Shakespeare's boys.

Some of the players accidentally conversing with him, found him possessed of an admirable fund of wit, and talents, adapted to the stage; and, astonished at this unexpected discovery, they introduced and recommended him to the company, into whose society he was admitted, but in a very humble walk, and upon low terms. He did not, however, long remain so, for he soon distinguished himself, if not as an extraordinary actor, at least as a fine writer. His name is printed, as the custom was in those times, amongst those of the other players, before some old players but without any particular account of what cast of characters he used to play; and after the most diligent researches, it appears, that the most considerable part he ever performed was the ghost in his own historical tragedy of *Hamlet*.

It would undoubtedly afford great satisfaction to the curious to be able to ascertain, from proper authorities, what was the first poetical essay of the immense genius of Shakespeare, that it might be traced through its gradual progressions to that summit of perfection it at length attained. But here likewise we are left in the dark.

The highest date which Rowe has been able to trace is that of *Romeo and Juliet*, in 1597, when the author was thirty-three years old; and *Richard II.* and *III.* the next year. But whatever the particular times of his writings were, the people of the age he lived in, who began to grow wonderfully fond of diversions of this kind, could not but be highly pleased to see a genius arise amongst them of so pleasurable, so rich, and so abundant a vein, capable of furnishing such a variety of their favourite entertainments.

Besides the advantages which Shakespeare had over all men in the article of wit, he was of a sweet, gentle, amiable disposition, and was a most agreeable companion; by which he endeared himself to all who knew him, both as a friend and as a poet; so that he was introduced into the best company, and conversed with the finest characters of his time.

Queen Elizabeth had several of his plays acted before her; and she was too quick a discerner of merit, to suffer Shakespeare's to escape her notice. It is assuredly that maiden princess whom he thus describes:

—A fair vestal, throned by the west.

Midsummer Night's dream.

Queen Elizabeth was so well pleased with the admirable character of Falstaff, in the two parts of *Henry IV.* that she commanded him to continue it in one play more, and to make him in love. This is said to have been the occasion of his writing the *Merry Wives of Windsor*.

It appears by the epilogue to *Henry IV.* that the part of Falstaff was written originally under the name of Oldcastle. Some of that family being then remaining, the queen was pleased to command him to alter it; upon which he made use of the name of Falstaff. The first offence was indeed avoided! but it is doubted whether the author might not be somewhat to blame in his second choice, since it is certain that Sir John Falstaff, or Fastolf, who was a knight of the garter, and a lieutenant-general, was a person of distinguished merit in the wars against France, in the reigns of *Henry V.* and *Henry VI.*

Besides the royal patronage, Shakespeare received many great and uncommon favours from the generous Earl of Southampton, so famous in history for his friendship to the unfortunate Earl of Essex. It was to that nobleman he dedicated his poem of *Venus and Adonis*; and it is reported that his lordship gave our author a thousand pounds to enable him to accomplish a purchase he heard he had a

mind to make; a bounty at that time very considerable, as money was then valued. There are few instances of such liberality in our times.

We have no clear account when Shakespeare quitted the stage for a private life. Some have thought that Spenser's *Thalia*, in the *Tears of the Muses*, where she laments the loss of her Willy, in the comic scene, relates to our poet's abandoning the stage: but it is well known that Spenser himself died in the year 1598: and five years after this, we find Shakespeare's name among the actors in Ben Jonson's *Sejanus*, which first made its appearance in 1603; nor could he then have any thoughts of retiring, since that very year, a licence, by King James I. was granted to him, with Burbage, Philips, Hemmings, Condel, &c. to exercise the art of playing comedies, tragedies, &c. as well at their usual house, called the Globe, on the Bankside, Southwark, as in any other part of the kingdom, during his majesty's pleasure. This licence is printed in Rymer's *Fœdera*. Besides, it is certain that Shakespeare did not write *Macbeth* till after the accession of King James I. which he did as a compliment to him; as he there embraces the doctrine of witches; of which his majesty was so fond, that he wrote a book, called *Dæmonology*, in defence of their existence; and likewise, at that time, began to touch for the evil; which Shakespeare has taken notice of, and paid him a fine turned compliment upon it. So that the passage in *Thalia*, if it relates at all to Shakespeare, must hint at some occasional recess which he made for a time.

What particular friendships he contracted with private men we cannot at this time know, more than that every one who had a true taste for merit, and could distinguish men, had generally a just value and esteem for him. His uncommon candour and good nature must certainly have inclined all the gentler part of the world to love him, as the power of his wit obliged the men of the most refined knowledge and polite learning to admire him.

His acquaintance with Ben Jonson began with a remarkable piece of humanity and good nature. Mr. Jonson, who was at that time altogether unknown to the world, had offered one of his plays to the stage, in order to have it acted; and the person into whose hands it was put, after having turned it carelessly over, was just upon returning it to him, with an ill-natured answer, that it would be of no service to their company; when Shakespeare luckily cast his eye upon it, and found something such merit in it,

as to engage him first to read it through, and afterwards to recommend Jonson and his writings to the public.

The latter part of our author's life was spent in ease and retirement. He had the good fortune to acquire a decent competency; and he resided some years before his death at his native town, Stratford-upon-Avon, in a handsome house he had purchased, to which he gave the name of New Place. He had likewise the good fortune to save it from the flames, when a dreadful fire consumed the greatest part of the town in 1614. His pleasant wit and good-nature engaged him the acquaintance, and entitled him to the friendship of the gentlemen of the neighbourhood.

In the beginning of the year 1616 Shakespeare made his will, in which he left £150 to his eldest daughter, Judith, to be paid to her within twelve months after his decease; and £150 more to be paid to her three years after the date of his will. But he appointed his youngest daughter, who was his favourite, and her husband, Dr. John Hall, a physician of great repute in the county, joint executors; bequeathing to them the best part of his estate. He also left legacies to his sister Joan, and her three sons; ten pounds to the poor of Stratford, his sword to Mr. Thomas Combe, and rings to his old associates in the playhouse, Hemmings, Burbage, and Condel.

He died in April of the same year, and was interred on the north side of the chancel, in the great church of Stratford, where a handsome monument was erected for him, on which the following distich is inscribed:

Judicio Pylum, genio Socratem, arte Maronem,
Terra tegit, populus mœret, Olympus habet.

In the year 1740 a very noble monument was erected to the memory of our immortal bard, in Westminster Abbey, at the public expense. For this purpose his tragedy of Julius Cæsar was performed at the theatre royal in Drury Lane, on the 28th of April, 1738. The tickets for admission were fixed at an extraordinary price. The Earl of Burlington, Dr. Mead, Mr. Pope and Mr. Fleetwood, patentee of the theatre, were appointed trustees upon this occasion, and under their direction the monument was designed by Mr. Kent, and executed by Scheemakers, an eminent statuary.

The figure of Shakespeare is a whole length, in which marble, dressed in the habit of his time; reclining on the right arm, which is supported by a pedestal;

of which issues a scroll, having the following lines of his *Tempest* inscribed thereon :

The cloud-capt towers, the gorgeous palaces,
The solemn temples, the great globe itself ;
Yea, all which it inhabit shall dissolve,
And, like the baseless fabric of a vision, , •
Leave not a wrack behind.

It is to be lamented that so few incidents of the life of Shakespeare have been handed down to posterity ; but this may, in some degree, be accounted for, from the little vicissitude to which it was subject. A single accident carried him to London ; and here the constant exertion of his great abilities conducted him, by an easy regular transition, from indigence and obscurity, to competency and fame. His sound judgment suggested to him the felicity of retirement, as soon as he had accomplished his moderate wishes ; and here the scene of active life closing, no extraordinary occurrences happened to swell the annals of his peaceful days.

Shakespeare's widow survived him seven years, and his family became extinct in the third generation after him : for his eldest daughter married Mr. Thomas Quincey, by whom she had three sons, but they died without issue.

As for Mrs. Hall, she left one child, a daughter, who was married to Thomas Nash, Esq. and afterwards to Sir John Bernard, of Abingdon ; but she likewise died without issue.

DUKE OF MARLBOROUGH.

JOHN CHURCHILL, who according to the prediction of the prince de Vaudemont, lived to attain the highest pitch of glory to which any subject could possibly be exalted, and which has been only equalled by that of the Duke of Wellington, the *Marlborough* of our own times, was the second son of Sir Winston Churchill of Dorsetshire, a gentleman who suffered greatly during the civil wars for his loyalty to Charles I. so that he was obliged, in those troublesome times, to live privately with his lady, the daughter of Sir John Drake, of Ashe, in Devonshire, at whose seat our immortal hero was born, on the 24th of June, 1650.

A clergyman in the neighbourhood instructed him in the first principles of literature ; but his father, after the Res-

toration, being received into great favour with Charles II. and enjoying some considerable posts under him, besides being member of parliament for Weymouth, he judged it prudent to introduce his son John (his elder brother dying in his infancy) early to court, where he was particularly favoured by James, Duke of York, who made him his page of honour when he was no more than twelve years of age.

He had a pair of colours given him in the guards during the first Dutch war, about the year 1666; and afterwards obtained leave to go over to Tangier, then in our hands, and besieged by the Moors; where he resided for some time, cultivated attentively the science of arms, and was personally engaged in several skirmishes with the Moors. Upon his return to England he attended constantly at court, and was greatly respected both by the king and the duke.

In the year 1672, the Duke of Monmouth commanding a body of English auxiliaries in the service of France, Mr. Churchill attended him, and was soon after made a captain of grenadiers in his grace's own regiment. He had a share in all the actions of that famous campaign against the Dutch; and at the siege of Nimeguen, distinguished himself so much, that he was particularly taken notice of by the celebrated Marshal Turenne, who bestowed on him the name of "the handsome Englishman," by which appellation he was known in the French army for many years. Another circumstance, while he was on this service, rendered this a title of honour to him; for a French lieutenant-colonel having deserted a pass, upon the approach of a Dutch detachment, Marshal Turenne, who commanded the French army, laid a wager, that, difficult and dangerous as the enterprise was, this "handsome Englishman" should retake the pass with half the number of men with which the other had lost it; which Captain Churchill successfully effected.

The next year he signalized himself in such a manner by his intrepidity at the reduction of Mæstricht, that the French king thanked him for his behaviour at the head of the line; and assured him, that he would acquaint his sovereign with it, which he did: and the Duke of Monmouth, on his return to England, told the king his father how much he had been indebted to the bravery of Captain Churchill.

The laurels he reaped in France paved his way to preferment at home: accordingly the king promoted him to the rank of lieutenant-colonel; and the Duke of York made him gentleman of his bed-chamber, and soon after

master of the robes. The second Dutch war being over, Colonel Churchill was again obliged to pass his days at court, where he behaved with great prudence and circumspection in the factional times that ensued.

In the beginning of the year 1679, when the Duke of York was constrained to retire from England to the Low Countries, Colonel Churchill attended him, as he did throughout all his peregrinations, till he was suffered to reside again in London. While he waited upon the duke in Scotland, he had a regiment of dragoons given him; and in 1681 he paid his addresses to Mrs. Sarah Jennings, daughter of Richard Jennings, Esq. of Sandridge, in Hertfordshire, one of the most handsome and accomplished ladies of the court, and then in attendance on the princess, afterwards Queen Anne.

In the spring of the year 1682 the Duke of York returned to London and, having obtained leave to quit Scotland, resolved to fetch his family from thence by sea. For this purpose he embarked on the second of May, but unluckily ran upon the Lemon Oar, a dangerous sand, that lies about sixteen leagues from the mouth of the Humber; where his ship was lost, and several persons of quality, besides upwards of one hundred and twenty private gentlemen and seamen, perished. The duke was particularly careful of Colonel Churchill's safety, and took him into the boat in which himself escaped.

The first use made by his royal highness of his interest, after his return to court, was to obtain a title for his favourite, who, by letters patent, bearing date on the first of December, 1682, was created Baron Churchill of Aymouth, in Scotland, and also appointed colonel of the third troop of guards.

He was continued in all his posts by James II. who sent him also as his ambassador to France, to notify his ascension. On his return he assisted at the coronation, on the 23rd of April 1685; and in May following was created a peer of England, by the title of Baron Churchill, of Sandridge, in the county of Hertford.

In June, Lord Churchill, being then lieutenant-general of his majesty's forces, was ordered into the west, to suppress the Duke of Monmouth's rebellion; which he did in a month's time, with an inconsiderable body of horse, and took the duke himself prisoner. He was extremely well received by the king at his return from this victory; but soon discerned, as it is said, the bad effects it produced, by con-

firming the king in an opinion, that by virtue of a standing army, the religion and government of England might easily be changed. How far Lord Churchill concurred with, or opposed the king, while he was forming this project, cannot well be ascertained. He does not however appear to have been guilty of any mean compliances, or to have had any concern in advising or executing the violent proceedings of that unhappy reign; on the contrary, Bishop Burnet tells us, that "he very prudently declined meddling much in business, spoke little, except when his advice was asked, and then always recommended moderate measures." It is said he declared very early to the Lord Galway, that if his master attempted to overturn the established religion he would leave him; and that he signed the memorial transmitted to the Prince and Princess of Orange, by which they were invited to rescue this nation from popery and slavery. Be this as it will, it is certain that he remained with and was entrusted by the king, after the Prince of Orange had landed on the 5th of November, 1688.

He attended King James when he marched with his forces to oppose the prince, and had the command of a brigade of 5000 men; yet the Earl of Feversham, the king's general, suspecting his inclinations, advised the king to seize him. The king's affection to him was so great that he could not be prevailed upon to do it; and this left him at liberty to go over to the prince; which he accordingly did, but without betraying any post, or carrying off any troops.

Whoever considers the great obligations Lord Churchill lay under to King James, must naturally conclude, that he could not take the resolution of leaving him, and withdrawing to the Prince of Orange, but with infinite concern and regret; and that this was really the case, appears very plainly from the following letter, which he left for the king, to shew the reasons of his conduct, and to express his grief for the step he was obliged to take.

"SIR,

"Since men are seldom suspected of sincerity when they act contrary to their interests; and though my dutiful behaviour to your majesty, in the worst of times, for which I acknowledge my poor services much overpaid, may not be sufficient to incline you to a charitable interpretation of my actions; yet I hope the great advantage I enjoy under

your majesty, which I can never expect in any other change of government, may reasonably convince your majesty and the world, that I was actuated by a higher principle, when I offered that violence to my inclinations and interests, as to desert your majesty at a time when your affairs seem to challenge the strictest obedience from all your subjects; much more from one who lives under the greatest obligations imaginable to your majesty. This, Sir, could proceed from nothing but the inviolable dictates of my conscience, and a necessary concern for my religion, which no good man can oppose, and with which I am instructed nothing ought to come in competition.

“Heaven knows with what partiality my dutiful opinion of your majesty has hitherto represented those unhappy designs, which inconsiderate and self-interested men have framed against your majesty's true interest, and the protestant religion; but, as I can no longer join with such, to give a pretence by conquest to bring them to effect, so I will always, with hazard of my life and fortune, so much your majesty's due, endeavour to preserve your royal person and lawful right with all the tender concern and dutiful respect that becomes

“Your majesty's, &c.”

Lord Churchill was graciously received by the Prince of Orange; and it is supposed to have been in consequence of his Lordship's solicitations that Prince George of Denmark went over to him, as his consort, the Princess Anne, did soon after, by the advice of Lady Churchill. He was entrusted, in that critical conjuncture, by the Prince of Orange, first to re-assemble his troop of guards at London, and afterwards to reduce some lately raised regiments, and to new model the army; for which purpose he was invested with the rank and title of lieutenant-general.

Lord Churchill was one of the peers who voted that the throne was vacant; and, in consequence, the Prince and Princess of Orange being declared King and Queen of England upon the 6th of February, 1689, his lordship was, on the 14th, sworn of their privy-council, and one of the gentlemen of the bed-chamber to the king; and, on the 9th of April following, was raised to the dignity of Earl of Marlborough in the county of Wilts.

He assisted at the coronation of their majesties, and was soon after made commander-in-chief of the English forces sent over to Holland. He commanded at the battle of

Walcourt, in the province of Namur, which was fought on the 15th of August, 1689, and gave such extraordinary proofs of his skill, that Prince Waldeck, speaking in his commendation to King William, declared, "That he saw more into the art of war in a day, than some generals in many years."

It is to be observed, that King William commanded this year in Ireland; which was the reason of the Earl of Marlborough's being at the head of the English troops in Holland; where he laid the foundation of that fame among foreigners, which he afterwards extended all over Europe.

The following year King James having withdrawn himself from Ireland, the earl, who would never appear in the field against that monarch, accepted the command of a body of English forces, destined to act in conjunction with the German and Dutch auxiliaries in reducing Cork, and some other places of much importance; in all which he shewed such uncommon abilities, that, on his first appearance at court, after his return, King William was pleased to say, "That he knew no man so fit for a general who had seen so few campaigns."

Yet all these services did not hinder his being disgraced in a very sudden manner, in 1691; for, being in waiting at court, as lord of the bed-chamber, and having introduced to his majesty Lord George Hamilton, he was soon followed to his own house by that nobleman, with this short and surprising message, "That the king had no farther occasion for his services;" the more surprising, as his majesty just before, had not discovered the least coldness or displeasure towards him. The cause of this disgrace is not even at present known; but is supposed to have proceeded from his too close attachment to the interest of the Princess Anne, whom the king and queen wished to keep in a state of dependence upon them; but the Earl of Marlborough and his countess exerted their interest so effectually, that £5000 per annum was settled by parliament on the princess, which gave great offence to their majesties.

This strange and unexpected blow was followed by an event of a more extraordinary nature; for the earl and several other noblemen were committed to the Tower, upon a false charge of high treason. The accusation was grounded upon a paper, said to have been an association entered into, and signed by, these peers, against the government; but, upon examining the paper and the evidences closely at the council-board, the whole was discovered to be a forgery;

the lords were released, and the matter ended in a prosecution on their parts of the offenders, who were set in the pillory, and publicly whipped.

After Queen Mary's death, when the interest of the two courts were brought to a better agreement, King William thought fit to recal the Earl of Marlborough to his privy-council; and, in June 1698, appointed him governor to the Duke of Gloucester, with this extraordinary compliment, "Make him but what you are, and my nephew will be all I wish to see him."

The earl discharged the important duty of governor to the young prince in a manner equally satisfactory to the king and the nation; and great hopes were conceived of the promising genius of the royal pupil, when he was seized with a fever, occasioned by his overheating himself on his birthday, the 24th of July 1700, and on the 29th it took him off, in the 11th year of his age. His highness was the last prince of the British line, and the fourth and only surviving child of the Princess Anne. After the death of his mother, the crown, by the act of succession, descended, in consequence of his death, to the illustrious house of Hanover.

Soon after the death of the Duke of Gloucester, King William made the Earl of Marlborough commander in chief of the British forces in Holland, and ambassador extraordinary to the States General; and this was one of the last marks of honour the earl received from King William, except the recommendation of his Lordship to the Princess Anne, a little before his death, as the most proper person to be trusted with the command of the army which was to protect the liberty of Europe.

In March, 1702, about a week after the king's death, he was elected knight of the most noble order of the garter; and soon after declared captain-general of all her majesty's forces in England and abroad; upon which he was immediately sent over to the Hague, with the same character that he had the year before. His stay in Holland was very short, only just long enough to give the States General the necessary assurance of his royal mistress's sincere intention to pursue the plan that had formerly been settled. The States concurred with him in all that he proposed, and made him captain-general of all their forces, with an appointment of 100,000 florins per annum.

On his return to England he found the Queen's council already divided; some being for carrying the war on as

auxiliaries only ; others, for declaring against France and Spain immediately, and so becoming principals at once. The Earl of Marlborough joined with the latter ; and these carrying their point, war was declared upon the 4th of May, 1702, and approved afterwards. by parliament, 'though the Dutch at that time had not declared.

The Earl took the command on the 20th of June ; and, discerning that the States were made uneasy by the places which the enemy held on the frontiers, he began with attacking and reducing them. Accordingly, in this single campaign, he made himself master of the castles of Gravenbroeck and Wærts ; the towns of Venlo, Ruremond, and Stevenswært ; together with the city and citadel of Liege ; which last was taken sword in hand.

These advantages were considerable, and acknowledged as such by the States ; but they were likely to have been of a very short date ; for the army separating in the neighbourhood of Liege on the 3rd of November, the earl was taken the next day, in his passage by water, by a small party of thirty men from the garrison at Gueldres ; but it being towards night, and the earl with great composure presenting to the commanding officer of the detachment an old pass, which had been given to his brother, General Churchill, but which was now out of date, he was suffered to proceed, and arrived safe at the Hague, where they were in the utmost consternation at the accident which had befallen him.

The winter approaching, the earl embarked for England, and arrived in London on the 28th of November. The queen had been complimented some time before, by both houses of parliament, on the success of her arms in Flanders ; in consequence of which there had been a public thanksgiving on the 4th of November, when her majesty went in great state to St. Paul's.

Soon after a committee of the House of Commons waited upon the earl with the thanks of the house ; and on the 2nd of December her majesty declared her intention in council, of creating his Lordship a duke ; which she soon after did, by the title of Marquis of Blandford, and Duke of Marlborough. She likewise added a pension of £5000 per annum out of the post-office during her own life ; and sent a message to the House of Commons, signifying her desire that they would extend the pension by act of parliament, in the same manner as she had done the title to him and his heirs male ; but with this the house would not comply,

contenting themselves, in their addresses to the queen, with applauding her manner of rewarding public services, but declaring their inability to make such a precedent for alienating the revenue of the crown.

He was on the point of returning to Holland, when, on the 20th of February, 1703, his only son, the Marquis of Blandford, died at Cambridge, at the age of eighteen. This afflicting accident did not, however, long retard his grace: but he passed over to Holland, and arrived at the Hague on the 17th of March.

The nature of this work will not suffer us to relate all the military exploits in which the Duke of Marlborough was engaged; it is sufficient to say, that, numerous as they were, they were all successful. The French had a great army this year in Flanders, in the Low Countries, and in that part of Germany which the Elector of Cologne had put into their hands; and prodigious preparations were made under the most experienced commanders: but the vigilance and activity of the duke baffled them all.

When the campaign was over, his grace went to Dusseldorp, to have an interview with the Archduke Charles, who had just taken the title of Charles III, King of Spain; he made him a present of a rich sword from his side, at the same time highly complimenting him on his great military reputation. The Duke then accompanied the Spanish monarch to the Hague, and after a very short stay came over to England.

He arrived on the 13th of October, 1703; and, soon after, King Charles III. came likewise over to England, and arrived at Spithead on the 26th of December; upon which the dukes of Somerset and Marlborough were immediately sent to receive and conduct him to Windsor.

In the beginning of January, 1704, the States General desired leave of her majesty for his grace of Marlborough to come to the Hague; which being granted, his grace embarked on the fifteenth, and passed over to Rotterdam. He went from thence immediately to the Hague, where he communicated to the pensionary his sense of the necessity there was of attempting something the next campaign for the relief of the Emperor of Germany, Charles VI. whose affairs, at this time, were in the utmost distress, having the Bavarians on one side, and the Hungarian malecontents on the other, making incursions to the very gates of Vienna, while his whole force scarcely enabled him to maintain a

defensive war. This scheme being approved of, and the plan of it being adjusted, the duke returned to England on the 14th of February.

When the measures were properly settled at home, the duke, on the 8th of April, 1704, embarked for Holland; where, staying about a month to adjust the necessary steps, he began his march towards the heart of Germany, and after a conference held with Prince Eugene of Savoy and Prince Louis of Baden, he arrived before the strong entrenchments of the enemy at Schellenburg, very unexpectedly, on the 21st of June; and, after an obstinate and bloody battle, he entirely routed them. It was on this occasion that the emperor wrote the duke a letter with his own hand, acknowledging his great services, and offering him the title of a prince of the empire, which he modestly declined, till the queen afterwards commanded him to accept of it.

The duke made the best advantage of his success, and having advanced with the confederate army within a league of Augsburg, where the Elector of Bavaria was securely encamped under the cannon of that city, his grace so effectually cut off his communication with his electoral dominions, that seeing his subjects left to the mercy of the confederate army, he had actually agreed with the Duke of Marlborough to sign a treaty of peace, and abandon the French interest, when he received the news that Marshal Tallard, who commanded the French army, was on the point of joining him, which he did soon after; and this change of affairs brought on the famous battle of Hochstedt (a town near the village of Blenheim;) it was fought on the 13th of August, 1704, and the confederate army, under the command of Prince Eugene and the Duke of Marlborough, gained a complete victory over the French and the Bavarians. More than 10,000 French and Bavarians were killed in this memorable battle; near 10,000 were wounded, or drowned in the Danube; Marshal Tallard, the commander in chief of the French forces, was taken prisoner, and with him 13,000 of the combined army; 100 pieces of cannon, 24 mortars, 129 colours, 171 standards, 17 pair of kettle-drums, 3600 tents, 34 coaches, 300 mules laden with provisions, ammunition, and baggage, two bridges of boats, and fifteen barrels and eight casks of silver, were the spoils of the day. But what is still more remarkable, the victors lost only 4500 men killed, and about 8000 wounded or taken prisoners. This battle is

generally styled in history the battle of **Blenheim**; though it is sometimes called that of **Hochstedt**.

After this glorious action, by which the empire was saved, and the whole electorate of **Bavaria** conquered, the duke continued his pursuit till he forced the French to repass the **Rhine**. Then **Prince Louis of Baden** laid siege to **Landau**, while the duke and **Prince Eugene** covered it; but it was not taken till the 12th of **November**. The duke made a tour also to **Berlin**; and, by a short negotiation, suspended the disputes between the **King of Prussia** and the **Dutch**, by which he gained the good will of both parties.

When the campaign was over he returned to **Holland**, and on the 14th of **December** arrived in **England**. He brought over with him **Marshal Tallard**, and 26 other officers of distinction, and the colours: which, by her majesty's order, were put up in **Westminster Hall**.

He was received by the queen and her royal consort with the highest marks of esteem, and had the solemn thanks of both houses of parliament. Besides this, the commons addressed her majesty to perpetuate the memory of this victory; which she did, by granting **Woodstock**, with the hundred of **Wootton**, to him and his heirs for ever. This was confirmed by an act of parliament, which passed on the 14th of **March** following, with this remarkable clause, "That they should be held by the duke and his heirs, on condition of tendering to the queen, her heirs, and successors, on the 2nd of **August**, every year, for ever, at the **Castle of Windsor**, a standard with three *fleurs de lis*, the arms of **France**, painted thereon."

The comptroller of the queen's works was likewise ordered to build a magnificent palace for the duke in **Woodstock Park**, which was called **Blenheim House**, and is now a standing memorial of the general's and the nation's glory, acquired by one of the most celebrated victories in the annals of **Europe**.

On the 6th of **January** the duke was sumptuously entertained by the city of **London**; and on the 8th of **February** the commons addressed the queen to testify their thanks for the treaty which the duke had concluded with the court of **Berlin**, by which a large body of **Prussian** troops were sent to the assistance of the **Duke of Savoy**.

The next year, 1705, the duke went over to **Holland** in **March**, with a design to execute some great schemes which he had been projecting in the winter. The campaign

was attended with some successes, which would have made a considerable figure in a campaign under any other general, but are scarcely worth mentioning where the Duke of Marlborough commanded. He could not carry into execution his main project, on account of the impediments he met with from the allies, and, in this respect, was greatly disappointed.

The season for action being over, he made a tour to the courts of Vienna, Berlin, and Hanover. At the first of these he acquired the entire confidence of the new emperor, Joseph I. who presented him with the principality of Mindelheim; at the second, he renewed the contract for the Prussian forces; and at the third, he restored a perfect harmony, and adjusted every thing to the elector's satisfaction. After this he returned to the Hague, and towards the close of the year embarked for, and arrived safe in England.

Upon the 7th of January, 1706, the House of Commons came to a resolution to thank his grace of Marlborough, as well for his prudent negotiations as for his great military services; but notwithstanding this, it very soon appeared that there was a strong party formed against the war, and steps were taken to censure and disgrace the conduct of the duke.

All things being concerted for rendering the campaign of this year more successful than the former, the duke, in the beginning of April, embarked for Holland, and, after several inferior advantages, he gained a complete victory over the Duke of Bavaria and Marshal Villeroy, at the village of Ramillies, on the 12th of May, being Whitsunday. The duke was twice in the utmost danger in this action, once by a fall from his horse, and a second time by a cannon shot, which took off the head of Colonel Bingfield, as he was holding the stirrup for his grace to remount.

The French and the Bavarians lost several thousand men, besides 6000 taken prisoners, with great part of their artillery and baggage; the loss of the allies was very inconsiderable; and this victory is known in history by the title of the battle of Ramillies.

The advantages gained by this victory were so far improved by the vigilance and wisdom of the duke, that Louvian, Brussels, Mechlin, and even Ghent and Bruges, submitted to King Charles III. of Spain without a stroke and Oudenard surrendered upon the first summons. The city of Antwerp followed this example. And thus, in the

short space of a fortnight, the duke reduced all Brabant, and the marquisate of the Holy Empire, to the obedience of King Charles. He afterwards took the towns of Ostend, Menin, Dendermonde, and Æth.

The forces of the allies, after this glorious campaign, being about to separate, his grace, on the 7th of October, went to the Hague; where the proposals which France had made for peace, contained in a letter from the Elector of Bavaria to the Duke of Marlborough, were communicated to the ministers of the allies; after which his grace embarked for England.

He arrived at London on the 8th of November; and though at this time there was a party formed against him at court, yet the great services he had done the nation, and the personal esteem the queen always had for him, procured him a universal good reception.

The House of Commons, in their address to the queen, spoke of the success of the campaign in general, and of the Duke of Marlborough's share in particular, in the strongest terms possible; and, the day after, unanimously voted him their thanks; and the lords did the same. They went still farther; for on the 17th of December they addressed the queen for leave to bring in a bill, to settle the duke's honours upon the male and female issue of his daughters. This was granted; and Blenheim House, with the manor of Woodstok, was, after the decease of the duchess, upon whom they were settled in jointure, entailed in the same manner with the honours.

Two days after this, the standards and colours taken at Ramillies being carried in state through the city, in order to be hung up in Guildhall, his grace of Marlborough was invited to dine with the lord mayor, which he accordingly did.

The last day of the year was appointed for a general thanksgiving; and her majesty went in state to St. Paul's; in which there was this singularity observed, that it was the second thanksgiving within the year.

On the 17th of January, 1707, the House of Commons presented an address to the queen, in which they signified, that as her majesty had built the house of Blenheim to perpetuate the memory of the Duke of Marlborough's services; and, as the House of Lords had ordered a bill for continuing his honours; ~~as~~ they were desirous to make some provision for the more honourable support of his dignity. In consequence of this, and of the queen's answer,

the pension of £5000 per annum from the post-office was settled in the manner the queen had formerly desired of another House of Commons, who happened not to be in quite so good a temper.

These points adjusted, his grace made haste to return to his charge, it being thought necessary he should acquaint the foreign ministers at the Hague, that the Queen of Great Britain would hearken to no proposals of peace but what would firmly secure the general tranquillity of Europe.

The campaign of the year 1707 proved the most barren one he ever made ; which was chiefly owing to a failure on the part of the allies, who began to flag in supporting the common cause. Nor did things go on more to his mind at home ; for, upon his return to England, after the campaign was over, he found that the fire which he suspected the year before had broken out in his absence ; that the queen had a female favourite, who was in a fair way of supplanting the duchess ; and that she listened to the insinuations of a statesman who was no friend to him. He is said to have borne all this with firmness and patience, though he easily saw to what it tended ; and he went to Holland, as usual, early in the spring of the year 1708, arriving at the Hague on the 19th of March.

The ensuing campaign was carried on by the duke, in conjunction with Prince Eugene, with such prodigious success, that the French king thought fit, in the beginning of the year 1709, to set on foot a negotiation for peace.

The House of Commons this year gave an uncommon testimony of their respect for the Duke of Marlborough ; for, besides addressing the queen, they, on the 22nd of January, 1709, unanimously voted thanks to his grace, and ordered them to be transmitted to him abroad by the speaker.

His grace returned to England on the 25th of February ; and on his first appearance in the House of Lords, received the thanks of that august assembly. His stay was so very short, that we need not dwell upon what passed in the winter. It is sufficient to say, that they who feared the dangerous effects of those artful proposals France had been making for the conclusion of a general peace, were also of opinion that nobody was so capable of setting their danger in a true light in Holland as his grace of Marlborough. This induced the queen to send him thither the latter end of March, in the character of her plenipotentiary ; which

contributed not a little to the enemy's disappointment, by defeating all their projects.

Marshal Villars commanded the French army in the campaign of the year 1709; and Louis XIV. expressed no small hopes of him, in saying, a little before the opening of it, that "Villars was never beaten." However, the siege of Tournay, and the battle of Malplaquet, convinced that monarch that Villars was not invincible.

Tournay surrendered to the allies on the 30th of July and on the 11th of September following was fought the battle of Blaregnies, or Malplaquet, near Mons; the allies were commanded by the Duke of Marlborough and Prince Eugene, and the French by the famous Marshals of France, Villars and Boufflers. Each army consisted of about 100,000 of the best troops ever seen in Europe; and after a most obstinate engagement, in which the allies had every difficulty to surmount, from the advantageous situation of the French army, they penetrated their entrenchments, and obliged the enemy to retreat; but this victory cost the allies very dear, for they lost 20,000 men. However, when the news arrived in England, the honour of gaining the day was thought so great, that the city of London renewed their congratulatory addresses to the queen; and her majesty in council, on the 3rd of October following, ordered the proclamation for a general thanksgiving.

The Duke of Marlborough came to St. James's on the 10th of November, and soon after received the thanks of both houses; and the queen, as if desirous of an occasion to shew her kindness to his grace, appointed him lord-lieutenant and custos rotulorum of the county of Oxford. But amidst these honours, preferments, and favours, the duke was really chagrined to the last degree. He perceived that the French intrigues began to prevail both in England and Holland; the affair of Dr. Sacheverel had thrown the nation into a ferment; and the queen was not only estranged from the Duchess of Marlborough, but had taken such a dislike to her, that she seldom appeared at court.

In the beginning of the year 1710 the French set on foot a new negotiation for a peace, which was commonly distinguished by the title of the treaty of Gertrudenburg. The States General, upon this, having shewn an inclination to enter into conferences with the French plenipotentiaries, the House of Commons immediately framed an address to the queen, that she would be pleased to send the Duke of

Marlborough over to the Hague; with which request her majesty complied; and towards the latter end of February his grace went to the Hague, where he met with Prince Eugene, and soon after set out with him for the army, which was assembled in the neighbourhood of Tournay.

This campaign was very successful, many towns being taken and fortresses reduced: notwithstanding which, when the duke came over to England, about the middle of December, he found his interest declining, and his services set at nought. The negotiations for peace were carried on during a great part of the summer; but in July the French and the Dutch ministry broke off the treaty: all the other preliminaries had been settled, when the Dutch insisted that the French king should take upon himself to compel his grandson Philip to cede the throne of Spain to Charles III. and not leave the allies engaged in a war with Spain. This the French would not agree to, and thus the negotiations came to nothing.

In the month of August the queen began the great change in her ministry, by removing the Earl of Sunderland from being Secretary of State: the Lord Treasurer Godolphin was likewise removed.

Upon the meeting of the parliament, no notice was taken in the addresses of the Duke of Marlborough's success; an attempt, indeed, was made to procure him the thanks of the House of Peers, but it was eagerly opposed by the Duke of Argyle. His grace was kindly received by the queen, who seemed desirous to have him live upon good terms with her new ministry; but this was thought impracticable; and it was every day expected that he would lay down his commission. He did not do this; but he carried the golden key, the ensign of the Duchess of Marlborough's dignity, on the 9th of January, 1711, to the queen, and resigned all her employments with great duty and submission. With the same firmness and composure he consulted the necessary measures for the next campaign with those whom he knew to be no friends of his; and treated all parties with candour and respect.

There is no doubt that the duke felt some inward disquiet, though he shewed no outward concern, at least for himself; but when the Earl of Galway was indecently treated in the House of Lords, the Duke of Marlborough could not help saying, it was somewhat strange, that generals, who had acted according to the best of their under-

standings, and had lost their limbs in the service, should be examined like offenders, about insignificant things.

An exterior civility, in court language styled a good understanding, being established between the duke and the new ministry, the duke went over to the Hague, to prepare for the next campaign, which, at the same time, he knew would be his last. He exerted himself in an uncommon manner, and it was attended with the usual success.

There was, in this campaign, a continued trial of skill between the Duke of Marlborough and Marshal Villars; and, as great a general as the latter was, he was obliged at length to submit to the former.

The duke embarked for England when the campaign was over, and came to London upon the 8th of November. He shewed some caution in his manner of coming; for happening to land the very night of Queen Elizabeth's inaugurations, when great rejoicings were intended by the populace, he continued very prudently at Greenwich, and the next day waited on the queen at Hampton Court, who received him graciously. He was visited by the ministers, and visited them; but he did not go to council, because a negotiation for peace was then on the carpet upon a basis which he did by no means approve.

He acquainted her majesty, in the audience he had at his arrival, that he could not concur in the measures of those who directed her councils, so he would not distract them by a fruitless opposition: yet finding himself attacked in the House of Lords, and loaded with the imputation of having protracted the war, he vindicated his conduct and character with great dignity and spirit; and in a most pathetic speech appealed to the queen his mistress, who was there *incognito*, for the falsehood of that imputation; declaring that he was as much for a peace as any man, provided it was such a peace as might be expected from a war undertaken on so just motives, and carried on with uninterrupted success.

This had a great effect on that august assembly, and perhaps made some impression on the queen; but, at the same time, it gave such an edge to the resentment of his enemies, who were then in power, that they resolved, at all events, to remove him. Those who were thus resolved to divest him of his commission, found themselves under a necessity to engage the queen to take it from him. This necessity arose chiefly from Prince Eugene's being expected

to come over with a commission from the emperor; and to give some colour to it, an enquiry was promoted in the House of Commons, to fix a very high imputation on the duke, as if he had put very large sums of public money into his pocket. When a question to this purpose had been carried, the queen, by a letter conceived in very obscure terms, acquainted him with her having no farther occasion for his service. and dismissed him from all his employments.

He was from this time exposed to the most painful persecution. On the one hand, he was attacked by the clamours of the populace, and by those licentious writers who are always ready to espouse the quarrels of a ministry, and to insult without mercy those they can insult with impunity. On the other hand, a prosecution was commenced against him by the attorney-general, for applying public money to his private use; and the workmen employed in building Blenheim House, though set at work by the crown, were encouraged to sue his grace for the money that was due to them. All his actions were also shamefully misrepresented.

These difficulties, joined to his grief for the death of the Earl of Godolphin, inclined his grace to gratify his enemies by a voluntary exile. Accordingly, he embarked at Dover upon the 14th of November, 1712; and landing at Ostend, went from thence to Antwerp, and so on to Aix la Chapelle, being every where received with the honours due to his high rank and merit. The Duchess of Marlborough also attended her Lord in all his journeys, and particularly in his visit to the principality of Mindelheim, which was given him by the emperor, and exchanged for another at the peace, which was made while the duke was abroad.

The conclusion of that peace was so far from restoring any harmony among the several parties of Great Britain, that it widened their differences exceedingly; insomuch that the chiefs, despairing of safety in the way they were in, are said to have secretly invited the Duke of Marlborough back to England. Be that as it may, it is very certain that the duke took a resolution of returning a little before the queen's death; and, landing at Dover, came to London upon the 4th of August, 1714.

• He was received with all possible demonstrations of joy by those who (upon the demise of the queen, which happened upon the first of that month) were entrusted with the government; and upon the arrival of King George I.

was particularly distinguished by acts of royal favour ; for he was again declared captain-general and commander-in-chief of all his majesty's land forces, colonel of the first regiment of foot guards, and master of the ordnance.

His advice was of great use in concerting those measures by which the rebellion in the year 1715 was crushed, and this was his last effort in respect to public affairs ; for his infirmities increasing with his years, he retired from business, and spent the greatest part of his time, during the remainder of his life, at one or other of his country houses.

His death happened on the 16th of June, 1722, at Windsor Lodge ; and his corpse, upon the 9th of August following, was interred with the highest solemnity in Westminster Abbey.

Besides the Marquis of Blandford, whom we have already mentioned, his grace had four daughters, who married into the best families of the kingdom.

COLONEL JAMES GARDINER,

BY DR. DODDRIDGE.

COLONEL JAMES GARDINER was the son of Captain Patrick Gardiner, of the family of Torwood Head, by Mrs. Mary Hodge, of the family of Gladsmuir. The captain, who was master of a handsome estate, served many years in the army of King William and Queen Anne, and died abroad with the British forces in Germany, quickly after the battle of Hochstedt, through the fatigues he underwent in the duties of that celebrated campaign. He had a company in the regiment of foot once commanded by Colonel Hodge, his valiant brother-in-law, who was slain at the head of that regiment, at the battle of Steenkirk, which was fought in the year 1692.

Mrs. Gardiner, our colonel's mother, was a lady of a very valuable character ; but it pleased God to exercise her with very uncommon trials ; for she not only lost her husband and her brother in the service of their country, as before related, but also her eldest son, Mr. Robert Gardiner, on the day which completed the 16th year of his age, at the siege of Namur, in 1695. But there is great reason to believe God blessed these various and heavy afflictions, as

the means of forming her to that eminent degree of piety, which will render her memory honourable, as long as it continues.

Her second son, the worthy person of whom we are now to give an account, was born at Carriden, in Linlithgowshire, on the 10th of January, A. D. 1688; the memorable year of that glorious Revolution, which he justly esteemed among the happiest of all events. So that when he was slain in the defence of those liberties which God then by so gracious a providence rescued from utter destruction, on the 21st of September, 1745, he was aged fifty-seven years, eight months, and eleven days.

Few remarkable things are on record concerning the early years of his life, only that his mother took care to instruct him, with great tenderness and affection, in the principles of true Christianity. He was also trained up in human literature at the school at Linlithgow, where he made a very considerable progress in the languages. The good effects of his mother's prudent and exemplary care were not so conspicuous as she wished and hoped, in the younger part of her son's life; yet there is great reason to believe they were not entirely lost.

Could his mother, or a very religious aunt (of whose good instructions and exhortations he has often spoken with pleasure) have prevailed, he would not have thought of a military life; from which it is no wonder these ladies endeavoured to dissuade him, considering the mournful experiences they had of the dangers attending it, and the dear relatives they had lost already by it. But it suited his taste; and the ardour of his spirit, animated by the persuasions of a friend who greatly urged it, was not to be restrained. Nor will the reader wonder, that thus excited and supported, it easily overbore their tender remonstrances, when he knows that this lively youth fought three duels before he attained to the stature of a man; in one of which, when he was but eight years old, he received from a boy much older than himself, a wound in his right cheek, the scar of which was always very apparent. The false sense of honour which instigated him to it, might seem indeed something excusable in those unripened years, and considering the profession of his father, brother, and uncle; but he has often mentioned this rashness with that regret which the reflection would naturally give to so wise and good a man in the maturity of life. And after his remarkable conversion, he once declined accepting a challenge, with this calm and truly great

reply, which in a man of his experienced bravery was exceeding graceful: "I fear sinning, though you know I do not fear fighting."

He served first as a cadet, which must have been very early: and then at fourteen years old he bore an ensign's commission in a Scotch regiment in the Dutch service; in which he continued till the year 1702, when he received an ensign's commission from Queen Anne, which he bore in the battle of Ramillies, being then in the nineteenth year of his age. In this ever-memorable action he received a wound in his mouth by a musket-ball, which has often been reported to be the occasion of his conversion; but that report was a mistaken one. However, as some very remarkable circumstances attended this affair, I shall be more particular in narrating it.

Our young officer was a party of the forlorn hope, and was commanded on what seemed almost a desperate service—to dispossess the French of the churchyard at Ramillies, where a considerable number of them were posted to remarkable advantage. They succeeded much better than was expected; and it may well be supposed, that Mr. Gardiner, who had before been in several encounters, and had the view of making his fortune to animate the natural intrepidity of his spirit, was glad of such an opportunity of signalizing himself. Accordingly, he had planted his colours on an advanced ground; and while he was calling to his men (probably in that horrid language which is so peculiar a disgrace to our soldiery, and so absurdly common in such articles of extreme danger) he received a shot into his mouth; which, without beating out any of his teeth, or touching the fore part of his tongue, went through his neck, and came out about an inch and a half on the left side of the vertebræ. Not feeling at first the pain of the stroke, he wondered what was become of the ball, and in the wildness of his surprise began to suspect he had swallowed it; but dropping soon after, he traced the passage of it by his finger, when he could discover it no other way.

This accident happened about five or six in the evening, on the 23rd day of May, in the year 1706; and the army pursuing its advantages against the French, without ever regarding the wounded (which was, it seems the Duke of Marlborough's constant method) our young officer lay all night in the field, agitated, as may well be supposed, with a great variety of thoughts. But expecting to recover, his

mind was taken up with contrivances to secure his gold, o. which he had a good deal about him ; and he had recourse to a very odd expedient, which proved successful. Expecting to be stripped, he first took out a handful of that clotted gore of which he was frequently obliged to clear his mouth, or he would have been choked ; and putting it into his left hand, he took out his money (about nineteen pistoles) and shutting his hand, and besmearing the back part of it with blood, he kept it in this position till the blood dried in such a manner that his hand could not easily fall open, though any sudden surprise should happen, in which he might lose the presence of mind which that concealment otherwise would have required.

In the morning the French, who were masters of that spot, though their forces were defeated at some distance, came to plunder the slain ; and seeing him to appearance almost expiring, one of them was just applying a sword to his breast, to destroy the little remainder of life ; when in the critical moment, upon which all the extraordinary events of such a life as his afterwards proved were suspended, a cordelier, who attended the plunderers, interposed, taking him by his dress for a Frenchman, and said, "Do not kill that poor child." Our young soldier heard all that passed, though he was not able to speak one word ; and, opening his eyes, made a sign for something to drink.

They gave him a sup of some spiritous liquor, which happened to be at hand ; by which he said he found a more sensible refreshment than he could remember from any thing he had tasted either before or since. Then signifying to the friar to lean down his ear to his mouth, he employed the first efforts of his feeble breath, in telling him (what, alas ! was a contrived falsehood) that he was nephew to the governor of Huy, a neutral town in the neighbourhood ; and that, if he could take any method of conveying him thither, he did not doubt but his uncle would liberally reward him. He had indeed a friend at Huy, from whom he expected a kind reception ; but the relation was only pretended. On hearing this, they laid him on a sort of hand-barrow, and sent him by a file of musqueteers towards the place ; but the men lost their way, and got in a wood towards the evening, in which they were obliged to continue all night. The poor patient's wound being still undressed, it is not to be wondered that by this time it raged violently. The anguish of it engaged him earnestly to beg that they would either kill him outright or leave him there

to die, without the torture of any farther motion ; and indeed they were obliged to rest for a considerable time, on account of their own weariness. Thus he spent the second night in the open air, without any thing more than a common bandage to staunch the blood. He has often mentioned it as a most astonishing providence, that he did not bleed to death ; which, under God, he ascribed to the remarkable coldness of these two nights.

Judging it quite unsafe to attempt carrying him to Huy, from whence they were now several miles distant, his convey took him early in the morning to a convent in the neighbourhood, where he was hospitably received, and treated with great kindness and tenderness. But the cure of his wound was committed to an ignorant barber-surgeon, who lived near the house ; the best shift that could then be made at that time, when it might easily be supposed persons of ability in their profession had their hands full of employment. The tent which this artist applied was almost like a peg driven into the wound ; and gentlemen of skill and experience, when they came to hear of the manner in which he was treated, wondered how he could possibly survive such management. But by the blessing of God on these applications, rough as they were, he recovered in a few months. The lady abbess, who called him her son, treated him with the affection and care of a mother ; and he always declared that every thing which he saw within these walls was conducted with the strictest decency and decorum. He received a great many devout admonitions from the ladies there ; and they would fain have persuaded him to acknowledge what they thought of so miraculous a deliverance, by embracing the catholic faith, as they were pleased to call it. But they could not succeed : for though no religion lay near his heart, yet he had too much of the spirit of a gentleman, lightly to change that form of religion which he wore, as it were, loose about him ; as well as too much good sense to swallow those monstrous absurdities of popery, which immediately presented themselves to him, unacquainted as he was with the niceties of the controversy. When his liberty was regained by an exchange of prisoners, and his health thoroughly established, he was far from rendering unto the Lord according to that wonderful display of divine mercy which he had experienced.

Little is known of the particulars of those wild, thoughtless, and wretched years which lay between the 19th and the 30th of his life ; except it be that he frequently ex-

perienced the divine goodness in renewed instances, particularly in preserving him in several hot military actions, in all of which he never received so much as a wound after this, forward as he was in tempting danger; and yet, that all these years were spent in an entire alienation from God, and an eager pursuit of animal pleasure, as his supreme good. The series of criminal amours in which he was almost incessantly engaged during this time, must probably have afforded some remarkable adventures and occurrences; but the memory of them is perished.

Amidst all these pernicious wanderings from the paths of religion, virtue, and happiness, he approved himself so well in his military character, that he was made a lieutenant in that year namely, 1706; and very quickly after promoted to a cornet's commission in Lord Stair's regiment of Scotch Greys; and on the 31st of January, in the year 1715, was made captain-lieutenant in Colonel Ker's regiment of dragoons. He had the honour of being known to the Earl of Stair some time before, and was made his aid-de-camp; and when, upon his Lordship's being appointed ambassador from his late majesty to the court of France, he made so splendid an entrance into Paris, Captain Gardiner was his master of the horse; and a great deal of the care of that admirably well adjusted ceremony fell upon him; so that he gained great credit by the manner in which he conducted it. Under the benign influences of his Lordship's favour (which to the last day of his life he retained) a captain's commission was procured for him (dated July 22, in the year 1715) in the regiment of dragoons commanded by Colonel Stanhope; and in the year 1717 he was advanced to the majority of that regiment: in which office he continued till it was reduced, on November the 10th, 1718, when he was put out of commission. But then his majesty King George I. was so thoroughly apprised of his faithful and important services, that he gave him his sign manual, entitling him to the first majority that should become vacant in any regiment of horse or dragoons, which happened about five years after to be in Croft's regiment of dragoons, in which he received a commission, dated June the 1st, 1724; and on the 20th of July, the same year, he was made major of an old regiment, commanded by the Earl of Stair.

We will now return to that period of his life which passed at Paris, the scene of such remarkable and important events. He continued several years under the roof of the brave and

generous Earl of Stair, to whom he endeavoured to approve himself by every instance of diligent and faithful service. And his lordship gave no inconsiderable proof of the dependence which he had upon him, when, in the beginning of the year 1715, he entrusted him with the important dispatches relating to the discovery, which, by a series of admirable policy, he made of a design which the French king was then forming for invading Great Britain in favour of the Pretender ; in which the French apprehended they were so sure of success, that it seemed a point of friendship in one of the chief counsellors of that court to dissuade a dependant of his from accepting some employment under his Britannic majesty, when proposed by his envoy there ; because it was said, that in less than six weeks there would be a revolution in favour of what they called the family of the Stuarts. The captain dispatched his journey with the utmost speed ; a variety of circumstances happily concurred to accelerate it ; and, considering how soon the regiments which that emergency required were raised and armed, we shall esteem it a memorable instance, both of the most cordial zeal in the friends of the government, and of the gracious care of divine Providence over the house of Hanover, and the British liberties, so incomparably connected with its interest.

While Captain Gardiner was in London, in one of the journeys he made upon this occasion, he with that frankness which was natural to him, and which in those days was not always under the most prudent restraint, ventured to predict, from what he knew of the bad state of the French king's health, that he would not live six weeks. This was made known by some spies who were at St. James's, and came to be reported at the court of Versailles ; for he received letters from some friends at Paris, advising him not to return thither, unless he could reconcile himself to a lodging in the Bastile. But he was soon free from that apprehension ; for before half that time was accomplished, Louis XIV. died ; and it is generally thought his death was hastened by a very accidental circumstance, which had some relation to the captain's prophecy. For the last time he ever dined in public, which was a very little while after the report of it had been made there, he happened to discover our British envoy among the spectators. The penetration of this illustrious person was too great, and his attachment to the interest of his royal master too well known, not to render him very disagreeable to that crafty and tran-

nical prince, whom God had so long suffered to be the disgrace of monarchy and the scourge of Europe. He at first appeared very languid, as indeed he was; but on casting his eye upon the Earl of Stair, he affected to appear before him in a much better state of health than he really was; and therefore, as if he had been awakened on a sudden from some deep reverie, immediately put himself into an erect posture, called up a laboured vivacity into his countenance, and ate much more heartily than was by any means advisable, repeating it two or three times to a nobleman then in waiting, "Methinks I eat very well for a man who is to die so soon." But this inroad upon that regularity of living which he had for some time observed, agreed so ill with him, that he never recovered this meal, but died in less than a fortnight. This gave occasion for some humorous people to say, that old Louis after all was killed by a Briton. But if this story be true, it might more properly be said that he fell by his own vanity.

The captain quickly returned, and continued with small interruptions at Paris, at least till the year 1720. The earl's favour and generosity made him easy in his affairs, though he was (as has been observed before) part of the time out of commission, by breaking the regiment to which he belonged, of which before he was major. This was in all probability the gayest part of his life, and the most criminal. Whatever wise and good examples he might find in the family where he had the honour to reside, it is certain that the French court during the regency of the Duke of Orleans was one of the most dissolute under heaven. What, by a wretched abuse of language, have been called intrigues of love and gallantry, were so entirely to the major's then degenerate taste, that if not the whole business, at least the whole happiness of his life consisted in them; and he had now too much leisure for one who was so prone to abuse it. His fine constitution, than which perhaps there was hardly ever a better, gave him great opportunities of indulging himself in these excesses; and his good spirits enabled him to pursue his pleasures of every kind in so alert and sprightly a manner, that multitudes envied him, and called him by a dreadful kind of compliment, "The happy rake."

Yet still the checks of conscience, and some remaining principles of so good an education, would break in upon his most licentious hours; and when, some of his dissolute

companions were once congratulating him on his distinguished felicity, a dog happened at that time to come into the room, he could not forbear groaning inwardly, and saying to himself, "Oh, that I were that dog!" Such was then his happiness; and such is that perhaps of hundreds more, who bear themselves highest in the contempt of religion, and glory in that infamous servitude which they effect to call liberty. But these remonstrances of reason and conscience were in vain; and, in short, he carried things so far, in this wretched part of his life, that some sober English gentlemen, who made no great pretences to religion, how agreeable soever he might have been to them on other accounts, rather declined than sought his company, as fearing they might have been ensnared and corrupted by it.

Yet in these most abandoned days he was not fond of drinking. Indeed he never had any natural relish for that kind of intemperance, from which he used to think a manly pride might be sufficient to preserve persons of sense and spirit: as by it they gave up every thing that distinguishes them from the meanest of their species, or indeed from animals the most below it. So that if ever he fell into any excesses of this kind, it was merely out of complaisance to his company, and that he might not appear stiff and singular. His frank, obliging, and generous temper, procured him many friends; and those principles, which rendered him amiable to others, not being under the direction of true wisdom and piety, sometimes made him, in the ways of living he pursued, more uneasy to himself than he might perhaps have been if he could entirely have outgrown them; especially as he was never a sceptic in his principles, but still retained a secret apprehension that natural and revealed religion, though he did not much care to think of either, were founded in truth. And with this conviction, his notorious violations of the most essential precepts of both, could not but occasion some secret misgivings of heart. His continual neglect of the great Author of his being, of whose perfections he could not doubt, and to whom he knew himself to be under daily and perpetual obligations, gave him, in some moments of involuntary reflection, inexpressible remorse; and this, at times, wrought upon him to such a degree that he resolved he would attempt to pay him some acknowledgments. Accordingly for a few mornings he did it; repeating in retirement some passages out of the Psalms, and perhaps other Scriptures

which he still retained in his memory ; and owing, in a few strong words, the many mercies and deliverances he had received, and the ill returns he had made for them.

But how readily soever he could repeat such acknowledgments of the divine power, presence, and goodness, and own his follies and faults, he was stopt short by the remonstrances of his conscience as to the flagrant absurdity of confessing sins he did not desire to forsake, and of pretending to praise God for his mercies, when he did not endeavour to live to his service, and to behave in such a manner as gratitude, if sincere, would plainly dictate. A model of devotion, where such sentiments made no part, his good sense could not digest ; and the use of such language before a heart-searching God, merely as a hypocritical form, while the sentiments of his soul were contrary to it, justly appeared to him such daring profaneness, that, irregular as the state of his mind was, the thought of it struck him with horror. He therefore determined to make no more attempts of this sort ; and was perhaps one of the first that deliberately laid aside prayer, from some sense of God's omniscience, and some natural principle of honour and conscience.

These secret debates with himself, and ineffectual efforts, would sometimes return : but they were overborne, again and again, by the force of temptation ; and it is no wonder that in consequence of them his heart grew yet harder. Nor was it softened or awakened by some very memorable deliverances, which at this time he received. He was in extreme danger by a fall from his horse, as he was riding post in the streets of Calais ; when going down a hill, the horse threw him over his head, and pitched over him, so that when he rose the beast lay beyond him, and almost dead. Yet, though he received not the least harm, it made no serious impression on his mind. In his return from England in the packet-boat, but a few weeks after the former accident, a violent storm that drove them up to Harwich, tossed them from thence for several hours, in a dark night, on the coast of Holland, and brought them into such extremity, that the captain of the vessel urged him to go to prayers immediately, if he ever intended to do it at all ; for he concluded they would in a few minutes be at the bottom of the sea. In this circumstance he did pray, and that very fervently too : and it was very remarkable, that while he was crying to God for deliverance, the wind fell, and quickly after they arrived at Calais. But the major

was so little affected with what had befallen him, that when some of his gay friends, on hearing the story, rallied him upon the efficacy of his prayers, he excused himself from the scandal of being thought much in earnest, by saying "that it was at midnight, an hour when his good mother and aunt were asleep; or else he should have left that part of the business to them."

And now we are come to that astonishing part of his story, the account of his conversion, which we give in the exact language of Dr. Doddridge, his biographer.

"This memorable event happened towards the middle of July, 1719, but I cannot be exact as to the day. The major had spent the evening (and, if I mistake not, it was the sabbath) in some gay company, and had an unhappy assignation with a married woman, of what rank or quality I did not particularly enquire, whom he was to attend exactly at twelve. The company broke up about eleven; and not judging it convenient to anticipate the time appointed, he went into his chamber to kill the tedious hour, perhaps with some amusing book, or some other way. But it very accidentally happened that he took up a religious book, which his good mother or aunt had, without his knowledge, slipped into his portmanteau. It was called, if I remember the title exactly, *The Christian Soldier, or Heaven taken by Storm*; and was written by Mr. Thomas Watson. Guessing by the title of it, that he should find some phrases of his own profession spiritualized, in a manner which he thought might afford him some diversion, he resolved to dip into it; but he took no serious notice of any thing he read in it: and yet, while this book was in his hand, an impression was made upon his mind (perhaps God only knows how) which drew after it a train of the most important and happy consequences.

"There is indeed a possibility, that while he was sitting in this attitude, and reading in this careless and profane manner, he might suddenly fall asleep, and only dream of what he apprehended he saw. But nothing can be more certain, than that, when he gave me this relation, he judged himself to have been as broad awake, during the whole time, as he ever was in any part of his life; and he mentioned it to me several times afterwards as what undoubtedly passed, not only in his imagination, but before his eyes.

"He thought he saw an unusual blaze of light fall on the book while he was reading, which he at first imagined might happen by some accident in the candle. But lifting

PART VIII. *or Youth's Instructor.*

up his eyes, he apprehended, to his extreme amazement, that there was before him, as it was suspended in the air, a visible representation of the Lord Jesus Christ upon the cross, surrounded on all sides with a glory; and was impressed as if a voice, or something equivalent to a voice, had come to him to this effect (for he was not confident as to the very words) "O sinners! did I suffer this for thee, and are these the returns?" But whether this were an audible voice, or only a strong impression on his mind equally striking, he did not seem very confident, though, to the best of my remembrance, he rather judged it to be the former. Struck with so amazing a phenomenon as this, there remained hardly any life in him, so that he sunk down in the arm-chair in which he sat, and continued, he knew not exactly how long, insensible (which was one circumstance that made me several times take the liberty to suggest, that he might possibly be all this while asleep); but however that were, he quickly after opened his eyes, and saw nothing more than usual.

"It may easily be supposed he was in no condition to make any observation upon the time in which he had remained in an insensible state. Nor did he throughout all the remainder of the night once recollect that criminal and detestable assignation, which had before engrossed all his thoughts. He rose in a tumult of passion not to be conceived, and walked to and fro in his chamber, till he was ready to drop down in unutterable astonishment and agony of heart; appearing to himself the vilest monster in the creation of God, who had all his lifetime been crucifying Christ afresh by his sins, and now saw, as he assuredly believed, by a miraculous vision, the horror of what he had done. With this was connected such a view, both of the majesty and goodness of God, as caused him to loathe and abhor himself, and to repent as in dust and ashes. He immediately gave judgment against himself, that he was most justly worthy of eternal damnation; he was astonished that he had not been immediately struck dead in the midst of his wickedness; and (which I think deserves particular remark) though he assuredly believed that he should ere long be in hell, and settled it as a point with himself for several months, that the wisdom and justice of God did almost necessarily require that such an enormous sinner should be made an example of everlasting vengeance, and a spectacle as such both to angels and men, so that he hardly durst resume to pray for pardon; yet what he then suffered was

not so much from the fear of hell, though he concluded it would soon be his portion, as from a sense of that horrible ingratitude he had shewn to the God of his life, and to that blessed Redeemer who had been in so affecting a manner set forth as crucified before him.

"To this he refers it in a letter dated from Douglas, April 1, 1725, communicated to be by his lady, but I know not to whom it was addressed. His words are these: 'One thing relating to my conversion, and a remarkable instance of the goodness of God to me, the chief of sinners, I do not remember that I ever told to any other person. It was this: that after the astonishing sight I had of my blessed Lord, the terrible condition in which I was, proceeded not so much from the terrors of the law, as from a sense from having been so ungrateful a monster to him whom I thought I saw piercing for my transgressions.' I the rather insert these words, as they evidently attest the circumstance which may seem most amazing in this affair, and contain so express a declaration of his own apprehension concerning it.

"In this view it may naturally be supposed that he passed the remainder of the night waking; and he could get but little rest in several that followed. His mind was continually taken up in reflecting on the divine purity and goodness; the grace which had been proposed to him in the gospel, and which he had rejected; the singular advantages he had enjoyed and abused; and the many favours of Providence which he had received, particularly in rescuing him from so many imminent dangers of death, which he now saw must have been attended with such dreadful and hopeless destruction. The privileges of his education, which he had so much despised, now lay with an almost insupportable weight on his mind; and the folly of that career of sinful pleasure, which he had so many years been running with desperate eagerness and unworthy delight, now filled him with indignation against himself, and against the great deceiver, by whom (to use his own phrase) he had been 'so wretchedly and scandalously befooled.' This he used often to express in the strongest terms; which I shall not repeat so particularly, as I cannot recollect some of them. But on the whole it is certain, that by what passed before he left his chamber the next day, the whole frame and disposition of his soul was new modelled and changed; so that he became, and continued to the last day of his exemplary and truly Christian life, the very reverse of what

he had been before. But I must here pause a while to adore so illustrious an instance of the power and freedom of divine grace, and entreating my reader seriously to reflect upon it; that his own heart may be suitably affected: for surely, if the truth of the fact be admitted in the lowest views in which it can be placed (that is, supposing the first impression to have passed in a dream) it must be allowed to have been little, if any thing less than miraculous. It cannot in the course of nature be imagined how such a dream should arise in a mind full of the most impure ideas and affections, and (as he himself often pleaded) more alienated from the thoughts of a crucified Saviour than from any other object that can be conceived: nor can we surely suppose it should, without a mighty energy of the divine power, be effectual to produce, not only some transient flow of passion, but so entire and so permanent a change in character and conduct.

“The mind of Major Gardiner continued from this remarkable time till towards the end of October (that is, rather more than three months, but especially the two first of them) in as extraordinary a situation as one can well imagine. He knew nothing of the joys arising from a sense of pardon; but, on the contrary, for the greater part of that time, and with very short intervals of hope toward the end of it, took it for granted, that he must, in all probability, quickly perish. Nevertheless he had such a sense of the evil of sin, of the goodness of the Divine Being, and of the admirable tendency of the Christian revelation, that he resolved to spend the remainder of his life, while God continued him out of hell, in as rational and as useful a manner as he could; and to continue casting himself at the feet of divine mercy every day, and often in a day, if peradventure there might be hope of pardon, of which all that he could say was, that he did not absolutely despair. He had at that time such a sense of the degeneracy of his own heart, that he hardly durst form any determinate resolution against sin, or pretend to engage himself by any vow in the presence of God; but he was continually crying to him, that he would deliver him from the bondage of corruption. He perceived in himself a most surprising alteration with regard to the dispositions of his heart so that, though he felt little of the delight of religious duties, he extremely desired opportunities of being engaged in them; and those licentious pleasures, which had before been his heaven, were now absolutely his . And indeed, when I

consider how habitable all those criminal indulgences were grown to him, and that he was now in the prime of life, and all this while in high health too, I cannot but be astonished to reflect upon it, that he should be so wonderfully sanctified in body as well as in soul and spirit as that, for all the future years of his life, he from that hour should find so constant a disinclination to, and abhorrence of those criminal sensualities, to which he fancied he was before so invincibly impelled by his very constitution, that he was used strangely to think, and to say, that Omnipotence itself could not reform him, without destroying that body, and giving him another.

“ Nor was he only delivered from that bondage of corruption, which had been habitual to him for many years, but felt in his breast so contrary a disposition, that he was grieved to see human nature, in those to whom he was most entirely a stranger, prostituted to such low and contemptible pursuits. He therefore exerted his natural courage in a very new kind of combat, and became an open advocate for religion, in all its principles, so far as he was acquainted with them, and all its precepts, relating to sobriety, righteousness, and godliness. Yet he was very desirous and cautious, that he might not run into an extreme, and made it one of his first petitions to God, the very day after these amazing impressions had been wrought in his mind, that he might not be suffered to behave with such an affected strictness and preciseness, as would lead others about him into mistaken notions of religion, and expose it to reproach or suspicion, as if it were an unlovely or uncomfortable thing. For this reason he endeavoured to appear as cheerful in conversation as he conscientiously could ; though, in spite of all his precautions, some traces of that deep inward sense which he had of his guilt and misery, would at times appear. He made no secret of it, however, that his views were entirely changed, though he concealed the particular circumstances attending that change. He told his most intimate companions freely, that he had reflected on the course of life in which he had so long joined them, and found it to be folly and madness, unworthy of a rational creature, and much more unworthy persons calling themselves Christians. And he set up his standard upon all occasions against principles of infidelity, and practices of vice, as determinately and as boldly as ever he displayed or planted his colours, when he bore them with so much honour in the field.

“ A remarkable instance of this happened, if I mistake not, about the middle of the year 1720, though I cannot be very exact as to the date of the story. It was, however, on his first return to make any considerable abode in England, after this remarkable change. He had heard, on the other side of the water, that it was currently reported among his companions at home that he was stark mad; a report at which no reader, who knows the wisdom of the world in these matters, will be much surprised, any more than himself. He concluded, therefore, that he should have many battles to fight, and was willing to dispatch the business as fast as he could. And therefore being to spend a few days at the country house of a person of distinguished rank, with whom he had been very intimate (whose name I do not remember that he told me, nor did I think it proper to enquire after it) he begged the favour of him that he would contrive matters so, that a day or two after he came down, several of their former gay companions might meet at his lordship's table; that he might have an opportunity of making his apology to them, and acquainting them with the nature and reasons of his change. It was accordingly agreed to; and a pretty large company met on the day appointed, with previous notice that Major Gardiner would be there. A good deal of raillery passed at dinner, to which the major made very little answer. But when the cloth was taken away, and the servants retired, he begged their patience for a few minutes, and then plainly and seriously told them what notions he entertained of virtue and religion, and on what consideration he had absolutely determined, that by the grace of God he would make it the care and business of his life, whatever censure and contempt he might incur. He well knew how improper it was in such company to relate the extraordinary manner in which he was awakened, which they would probably have interpreted to a demonstration of lunacy, against all the gravity and solidity of his discourse: but he contented himself with such a rational defence of a righteous, sober, and godly life, as he knew none of them could with any shadow of reason contest. He then challenged them to propose any thing they could urge, to prove that a life of irreligion and debauchery was preferable to the fear, love, and worship of the eternal God, and a conduct agreeable to the precepts of his gospel. And he failed not to bear his testimony from his own experience (to one part of which many of them had been witnesses) that after having run the widest round of sensual pleasure,

with all the advantages the best constitution and spirits could give him, he had never tasted any thing that deserved to be called happiness till he had made religion his refuge and his delight. He testified calmly and boldly the habitual serenity and peace that he now felt in his own breast (for the most elevated delights he did not think to plead, lest they should be esteemed enthusiasm) and the composure and pleasure with which he looked forward to objects, which the gayest sinner must acknowledge to be equally unavoidable and dreadful.

"I know not what might be attempted by some of the company in answer to this; but I well remember he told me, the master of the table, a person of a very frank and candid disposition, cut short the debate, and said, 'Come, let us call another cause: we thought this man mad, and he is in good earnest proving that we are so.' On the whole, this well judged circumstance saved him in a great deal of future trouble. When his former acquaintance observed that he was still conversable and innocently cheerful, and that he was immoveable in his resolutions, they desisted from further importunity. And he has assured me, that instead of losing any one valuable friend by this change in his character, he found himself much more esteemed and regarded by many who could not persuade themselves to imitate his example."

Our limits will not permit us to enter into the detail of the life of this extraordinary man: it is sufficient to remark, that it was one undeviating course of holiness; that his religious views and feelings, though so remarkable, were proved to be the effect not of a blind enthusiasm, but of divine influence; and that the path he had deliberately chosen was most eminently, in the language of holy writ, "the path of the just, which shines more and more unto the perfect day."

On the 11th of July, 1726, he was married to the Right Honourable Lady Frances Erskine, daughter to the late Earl of Buchan, by whom he had thirteen children, five only of whom survived their father. On the 24th of January, 1730, he was advanced to the rank of lieutenant-colonel, in a regiment long under the command of Lord Cadogan, with whose friendship he was honoured for many years. And he continued in this rank and regiment till the 19th of April, 1743, when he received a colonel's commission over a regiment of dragoons, lately commanded by Brigadier Bland at the head of which he valiantly fell.

in the defence of his sovereign and his country, in the year 1745, at the battle of Preston Pans, which was occasioned by the incursions of the rebels in favour of the Pretender. We shall close this account by a relation of that melancholy event, in the language of Dr. Doddridge.

“ On Friday, September 20, when the whole army was drawn up, I think about noon, the colonel rode through the ranks of his own regiment, addressing them at once in the most respectful and animating manner, both as soldiers and as Christians, to engage them to exert themselves courageously in the service of their country, and to neglect nothing that might have a tendency to prepare them for whatever event might happen. They seemed much affected with the address, and expressed a very ardent desire of attacking the enemy immediately: a desire in which he and another very gallant officer of distinguished rank, dignity, and character, both for bravery and conduct, would gladly have gratified them, if it had been in the power of either. He earnestly pressed it on the commanding officer, both as the soldiers were then in better spirits than it could be supposed they would be after having passed the night under arms; and also as the circumstance of making an attack would be some encouragement to them, and probably some terror to the enemy, who would have had the disadvantage of standing on the defence; a disadvantage with which those wild barbarians (for such most of them were) perhaps would have been more struck than better disciplined troops; especially when they fought against the laws of their country too. He also apprehended, that by marching to meet them, some advantage might have been secured with regard to the ground: with which it is natural to imagine he must have been perfectly acquainted, as it lay just at his own door, and he had rode over it so many hundred times. When I mention these things, I do not pretend to be capable of judging how far this advice was on the whole right: a variety of circumstances, to me unknown, might make it otherwise. It is certain, however, that it was brave. But it was overruled in this respect, as it was also in the disposition of the cannon, which he would have had planted in the centre of our small army, rather than just before his regiment, which was in the right wing, where he was apprehensive that the horses, which had not been in any engagement before, might be thrown into some disorder by the discharge so very near them. He urged this the more, as he thought the

attack of the rebels might probably be made on the centre of the foot ; where he knew there were some brave men, on whose standing he thought under God the success of the day depended. When he found that he could not carry either of these points, nor some others, which out of regard to the common safety, he insisted upon with some unusual earnestness, he dropped some intimations of the consequences which he apprehended, and which did in fact follow ; and submitting to providence, spent the remainder of the day in making as good a disposition as circumstances would allow.

“ He continued all night under arms, wrapped up in his cloak, and generally sheltered under a rick of barley, which happened to be in the field. About three in the morning he called his domestic servants to him, of which there were four in waiting. He dismissed three of them with most affectionate Christian advice, and such solemn charges relating to the performance of their duty and the care of their souls, as seemed plainly to intimate that he apprehended it at least very probable he was taking his last farewell of them. There is great reason to believe that he spent the little remainder of the time, which could not be much above an hour, in those devout exercises of soul which had so long been habitual to him, and to which so many circumstances did then concur to call him. The army was alarmed at break of day by the noise of the rebel's approach, and the attack was made before sunrise, yet when it was light enough to discern what passed. As soon as the enemy came within gunshot they made a furious fire ; and it is said that the dragoons which constituted the left wing immediately fled. The colonel at the beginning of the onset, which in the whole lasted but a few minutes, received a wound by a bullet in his left breast, which made him give a sudden spring in his saddle ; upon which his servant, who had led the horse, would have persuaded him to retreat ; but he said it was only a wound in the flesh, and fought on, though he presently after received a shot in his right thigh. In the mean time it was discerned that some of the enemies fell by him ; and particularly one man who had made him a treacherous visit but a few days before, with great profession of zeal for the present establishment. Events of this kind pass in less time than the description of them can be written, or than it can be read. The colonel was for a few moments supported by his men, and particularly by that worthy person Lieutenant-colonel

Whitney, who was shot through the arm here, and a few months after fell nobly in the battle of Falkirk; and by Lieutenant West, a man of distinguished bravery; as also by about fifteen dragoons, who stood by him to the last. But after a faint fire, the regiment in general was seized with a panic; and though their colonel and some other gallant officers did what they could to rally them once or twice, they at last took a precipitate flight. And just in the moment when Colonel Gardiner seemed to be making a pause, to deliberate what duty required him to do in such a circumstance, an accident happened, which must, I think, in the judgment of every worthy and generous man, be allowed a sufficient apology for exposing his life to so great hazard, when his regiment had left him. He saw a party of the foot who were then bravely fighting near him, and whom he was ordered to support, had no officer to head them; upon which he said eagerly, in the hearing of the person from whom I had this account, 'Those brave fellows will be cut to pieces for want of a commander,' or words to that effect: which while he was speaking, he rode up to them, and cried out aloud, 'Fire on, my lads, and fear nothing.' But just as the words were out of his mouth, a Highlander advanced towards him with a scythe fastened to a long pole, with which he gave him such a deep wound on his right arm, that his sword dropped out of his hand; and at the same time several others coming about him, while he was thus dreadfully entangled with that cruel weapon, he was dragged off from his horse. The moment he fell, another Highlander, who, if the king's evidence at Carlisle may be credited (as I know not why they should not, though the unhappy creature died denying it) was one Mac Nought, who was executed about a year after, gave him a stroke either with a broad sword, or a Lochabar axe (for my informant could not exactly distinguish) on the hinder part of his head, which was the mortal blow. All that his faithful attendant saw farther at this time was, that as his hat was fallen off, he took it in his left hand, and waved it as a signal for him to retreat; and added, what were the last words he ever heard him speak, 'Take care of yourself:' upon which the servant retired.

"It was reported at Edinburgh on the day of the battle, by what seemed a considerable authority, that as the colonel lay in his wounds, he said to a chief of the opposite side, 'You are fighting for an earthly crown, I am going to receive a heavenly one;' or something to that purpose.

When I preached the sermon, long since printed, on occasion of his death, I had great reason to believe this report was true ; though before the publication of it I began to be in doubt ; and on the whole, after the most accurate enquiry I could possibly make at this distance, I cannot get any convincing evidence of it. Yet I must here observe, that it does not appear impossible, that something of this kind might indeed be uttered by him ; as his servant testifies that he spoke to him after receiving that fatal blow, which would seem most likely to have taken away the power of speech ; and as it is certain he lived several hours after he fell. If, therefore, any thing of this kind did happen, it must have been just about this instant. But as to the story of his being taken prisoner, and carried to the pretended prince (who, by the way, afterwards rode his horse, and entered upon it into Derby) with several other circumstances which were grafted upon that interview, there is the most undoubted evidence of its falsehood : for his attendant mentioned above assures me, that he himself immediately fled to a mill, at the distance of about two miles from the spot of ground on which the colonel fell ; where he changed his dress, and, disguised like a miller's servant, returned with a cart as soon as possible : which yet was not till near two hours after the engagement. The hurry of the action was then pretty well over, and he found his much honoured master not only plundered of his watch and other things of value, but also stripped of his upper garments and boots, yet still breathing ; and adds, that though he was not capable of speaking, yet on taking him up he opened his eyes ; which makes it something questionable whether he were altogether insensible. In this condition, and in this manner, he conveyed him to the church of Tranent, from whence he was immediately taken into the minister's house, and laid in bed ; where he continued breathing, and frequently groaning, till about eleven in the forenoon ; when he took his final leave of pain and sorrow, and undoubtedly rose to those distinguished glories, which are reserved for those who have been so eminently and remarkably faithful unto death.

“ From the moment in which he fell it was no longer a battle, but a rout and carnage. The cruelties which the rebels (as it is generally said under the command of Lord Elcho) inflicted on some of the king's troops, after they had asked quarter, are dreadfully legible on the countenances of many who survived it. They entered Colonel Gardiner's

nouse before he was carried off from the field ; and notwithstanding the strict orders which the unhappy Duke of Perth (whose conduct is said to have been very humane in many instances) gave to the contrary, every thing of value was plundered, to the very curtains of the beds, and hangings of the rooms. His papers were all thrown into the wildest disorder, and his house made an hospital for the reception of those who were wounded in the action.

“ Such was the close of a life which had been so zealously devoted to God, and filled up with so many honourable services. This was the death of him who had been so highly favoured by God, in the method by which he was brought back to him after so long and so great an estrangement ; and in the progress of so many years, during which (in the expressive phrase of the most ancient of writers) ‘ he had walked with him ;’ to fall as God threatened the people of his wrath that they should do, ‘ with tumult, with shouting, and with the sound of the trumpet,’ Amos ii. 2. Several other very worthy, and some of them very eminent persons, shared the same fate ; either now in the battle of Preston Pans, or quickly after in that of Falkirk : Providence, no doubt, permitting it to establish our faith in the rewards of an invisible world ; as well as to teach us to cease from man, and fix our dependance on an almighty arm.

“ The remains of this Christian hero (as I believe every reader is now convinced he may justly be called) were interred the Tuesday following, September 24, at the parish church at Tranent, where he had usually attended divine service, with great solemnity. His obsequies were honoured with the presence of some persons of distinction, who were not afraid of paying that last piece of respect to his memory, though the country was then in the hands of the enemy. But indeed there was no great hazard in this, for his character was so well known, that even they themselves spoke honourably of him, and seemed to join with his friends in lamenting the fall of so brave and so worthy a man.

“ I conclude with humbly acknowledging the wisdom and goodness of that awful Providence which drew so thick a gloom around him in the last hours of his life, that the lustre of his virtues might dart through it with a more vivid and observable ray. It is abundant matter of thankfulness that so signal a monument of grace, and ornament of the Christian profession, was raised in our age and country, and spared for so many honourable and useful years. Nor

can all the tenderness of the most affectionate friendship, while its sorrows bleed afresh in the view of so tragical a scene, prevent my adoring the gracious appointment of the great Lord of all events, that when the day in which he must have expired without an enemy appeared so very near, the last ebb of his generous blood should be poured out as a kind of sacred libation to the liberties of his country, and the honour of his God! that all the other virtues of his character, embalmed as it were by that precious stream, might diffuse around a more extensive fragrancy, and be transmitted to the most remote posterity, with that peculiar charm which they cannot but derive from their connection with so gallant a fall: an event (as that blessed apostle, of whose spirit he so deeply drank, has expressed it) according to his earnest expectation, and his hope, that in him Christ might be glorified in all things, whether by his life or by his death."

DR. SAMUEL JOHNSON.

SAMUEL JOHNSON was born at Lichfield, in Staffordshire, on the 18th of September, 1709. He was son of Michael Johnson, a native of Derbyshire, who settled in Lichfield as a bookseller and stationer, and who was a zealous high churchman and Jacobite. He was initiated in grammar learning at the school at Lichfield, whence he was afterwards removed to the school at Stourbridge, in Worcestershire. He afterwards continued two years at home with his father, and when he was in his nineteenth year he was entered a commoner of Pembroke College, Oxford. In his early years he was much addicted to melancholy; and at the university his situation was rendered uneasy by the narrowness of his circumstances. He distinguished himself, however, by his abilities, and particularly by his poetical talents: but in 1731 he left the college, without a degree, his father being unable to support him any longer at the university, where he did not continue much above three years. In this forlorn state of circumstances, as Mr. Boswell expresses it, he accepted of an offer to be employed as usher in the school at Market Bosworth, in Leicestershire, whither he went on foot in July, 1732. The employment of an usher was very irksome to him, so that

he soon quitted it, and was invited by Mr. Hector, who had been his school-fellow, and was his intimate friend, to pass some time with him at Birmingham, as his guest, at the house of Mr. Warren, with whom Mr. Hector then lodged and boarded. Mr. Warren was the first established bookseller in Brimingham, and was very attentive to Johnson, who, he soon found, could be of much service to him in his trade, by his knowledge of literature; and he even obtained the assistance of his pen in furnishing some numbers of a periodical essay, printed in the newspaper of which Warren was proprietor. He continued to live as Mr. Hector's guest for about six months, and then hired lodgings in another part of the town, finding himself as well situate at Brimingham as he supposed he could be any where, while he had no settled plan of life, and very scanty means of subsistence. He made some valuable acquaintances there, amongst whom were Mr. Porter, a mercer, whose widow he afterwards married; and Mr. Taylor, who by his ingenuity in mechanical inventions, and his success in trade, acquired a large fortune. But the advantage of being near his friend Hector is said to have been his chief inducement for continuing here. During his stay at Brimingham he translated from the French Lobo's *Voyage to Abyssinia*, which was published in one volume, octavo, in 1735, and for which he received from the bookseller five guineas.

Before this book was printed, Johnson returned to Lichfield, and there published proposals for printing the Latin poems of Politian, with notes, and the life of Politian, &c. in one volume, at the price of five shillings, in sheets; but he did not meet with a sufficient number of subscribers to encourage him to proceed in his design. In 1735 he married, and soon after set up a private academy; for which purpose he hired a large house well situate near his native city. In the *Gentleman's Magazine* for 1736 is the following advertisement: "At Edial, near Lichfield, in Staffordshire, young gentlemen are boarded and taught the Latin and Greek languages, by Samuel Johnson." But the only pupils that were put under his care were the celebrated David Garrick and his brother George, and a young gentleman of fortune of the name of Offely, who died early. Meeting with so little encouragement in his academy, he came up to London in March, 1737, in company with David Garrick, who then intended to follow the profession of the law, from which he was soon diverted by his strong propensities

to the stage. Johnson was recommended by his friend Gilbert Walmsley, register of the prerogative court at Lichfield, to Mr. Colson, an eminent mathematician and master of an academy, in a letter, wherein is the following passage: "Davy Garrick is to be with you early the next week; and Mr. Johnson, to try his fate with a tragedy, and to see to get himself employed in some translation, either from the Latin or the French. Johnson is a very good scholar and poet, and I have great hopes will turn out a fine tragedy writer."

His first patron in London was Edward Cave, the printer of the *Gentleman's Magazine*; writing for this magazine being for many years his principal resource for employment and support. Soon after his arrival in London he finished his tragedy of *Irene*, and endeavoured to get it brought upon the stage; but he had not sufficient interest for that purpose; and it was not acted till 1749, when his friend David Garrick was manager of Drury Lane Theatre. In 1738 he published his *London*, a poem in imitation of the third satire of Juvenal. This gained him some reputation, and excited the attention of Pope; but the difficulties which he met with in London occasioned him, in 1739, to be desirous of being chosen master of a country free school, the salary of which was sixty pounds a year. This humble situation, however, he could not attain. It was necessary that he should be a master of arts; and Lord Gower was prevailed upon to write a letter in his favour to a friend of Dean Swift's, in order to induce him to use his interest with Swift to procure the degree of master of arts for Johnson from Trinity College, Dublin. But this application was unsuccessful; and there is much reason to believe that this was the source of that dislike to Swift which Johnson afterwards manifested, both in his conversation and in his writings.

In 1739 he published a complete *Vindication of the Licensers of the Stage*, from the malicious and scandalous aspersion of Mr. Brooke, author of *Gustavus Vasa*. This was an ironical, but a very proper attack, upon the Lord Chamberlain, for the unjustifiable suppression of that tragedy. The same year he published *Marmor Norfolciense*; or an *Essay on an ancient prophetic Inscription in monkish rhyme*, lately discovered near Lynn, in Norfolk, by Probus Britannicus. In this performance, he in a feigned inscription, supposed to have been found in Norfolk, the county of Sir Robert Walpole, inveighs against the Brunswick

succession, and the measures of government consequent upon it. To this supposed prophecy he added a commentary, very unfavourable to the family upon the throne.

Johnson also published proposals for printing the history of the Council of Trent, translated from the Italian of Father Paul Sarpi; with the author's life, and notes, theological, historical, and critical, from the French edition of Dr. Le Courayer. Some sheets of this were printed in quarto, by Cave, but the work was never finished.. In 1744 he published, in octavo, his *Life of Richard Savage*; and the same year he wrote the preface to the *Harleian Miscellany*. The following year he published a pamphlet entitled *Miscellaneous Observations on the Tragedy of Macbeth*, with Remarks on Sir Thomas Hanmer's Edition of Shakespeare; to which he affixed proposals for a new edition of that poet. In 1747 he published, in octavo, the *Plan of his Dictionary of the English Language*, which he addressed to the Earl of Chesterfield, then secretary of state. The booksellers who contracted with Johnson for the execution of this work were Mr. Robert Dodsley, Mr. Charles Hitch, Mr. Andrew Millar, the two Messieurs Longman, and the two Messieurs Knapton. The price stipulated was fifteen hundred and seventy-five pounds. Lord Chesterfield affected to patronize the work, but rendered so little service to Johnson of any kind, that he afterwards expressed himself of his pretended patron in terms not a little contemptuous.

In 1749 he published *The Vanity of Human Wishes*, in imitation of the tenth satire of Juvenal. Mr. Boswell says, that the *Vanity of Human Wishes* is, in the opinion of the best judges, as high an effort of ethic poetry as any language can shew. The instances of variety of disappointment are chosen so judiciously, and painted so strongly, that the moment they are read they bring conviction to every thinking mind. The same year his tragedy of *Irene* was performed at Drury Lane Theatre: by the favour of Garrick it was acted nine nights, but it was not received with any great degree of applause.

In 1750 Dr. Johnson began to publish his *Rambler*, in periodical numbers, and it was concluded in 1752. It is observed, by the author of the *Essay on the Life, Character, and Writings of Dr. Samuel Johnson*, that "it is to this admirable performance that he owes much of his reputation. It was not, however, on its first publication, very popular, nor very generally read. But the great merit of this work

was at length acknowledged. It has since passed through many editions, and been translated into foreign languages. In the *Rambler*, indeed, the finest sentiments of morality and of piety are rendered delightful by the harmony and splendour of the language. In his *Lives of the Poets*, as well as in some of his other works, there are no inconsiderable number of exceptionable passages, but his *Ramblers* are almost uniformly entitled to applause. The morality inculcated is pure, and the piety in general is rational; and the criticisms and observations on life and manners are acute and instructive. It is one of those works which may repeatedly be read, and which will repeatedly delight."

In 1755 the university of Oxford conferred on Johnson the degree of master of arts by diploma; and he same year he published; in two volumes, folio, his *Dictionary of the English Language*; and the following year he published an abridgment of it in two volumes, octavo. He afterwards occasionally employed himself in writing for magazines, and other periodical publications. In 1758 he published his *History of Rasselas, Prince of Abyssinia*.

In 1762 he received a pension from the king of three hundred pounds a year, which was continued to the end of his life. In 1765 the degree of doctor of laws was conferred on him by Trinity College, Dublin; and he received some years after the same degree from the university of Oxford. In 1765 he published his edition of *Shakespeare*; and this year he was introduced into the family of Mr. *Thrale*, an eminent and wealthy brewer, and member of parliament for the borough of Southwark. Mr. Boswell remarks, that "nothing could be more fortunate for Johnson than this connection. He had at Mr. *Thrale's* all the comforts and even luxuries of life; his melancholy was diverted, and his irregular habits lessened by association with an agreeable and well ordered family. He was treated with the utmost respect, and even affection. The vivacity of Mr. *Thrale's* literary talk roused him to cheerfulness and exertion, even when they were alone. But this was not often the case, for he found here a constant succession of what gave him the highest enjoyment, the society of the learned, the witty, and the eminent in every way, who were assembled in numerous companies, called forth his wonderful powers, and gratified him with admiration, to which no man could be insensible." In 1767 he had a private interview with the king, in the library at the Queen's Palace. In 1770 he published his *False Alarm*; the following year, *Thoughts*

concerning Falkland's Islands; and in 1774, *The Patriot*. These political pamphlets have great merit in point of language; but they contain much gross misrepresentation, and much malignity, and abound with such arbitrary principles as are totally inconsistent with a free constitution.

In the autumn of the year 1773 he undertook a journey to the Hebrides or Western Islands of Scotland, of which he published an account, in one volume, octavo, in 1775. Dr. Towers observes, that "this is a very masterly performance; for, besides a very pleasing account of his journey, it also contains a variety of acute observations on human life, and many curious incidental remarks relative to the history of literature, with which Dr. Johnson was very intimately conversant. In this journey he was accompanied by Mr. Boswell; and the habitual good humour of this gentleman, his vivacity, his love of literature, and his personal attachment to Johnson, together with his natural influence in Scotland, must have rendered him a very agreeable companion to him during the course of his tour to the Hebrides. Of this journey Mr. Boswell has himself since published an account, which is highly entertaining, and which appears to contain a very natural, exact, and faithful representation, not only of the incidents which occurred during the tour, but also of the singular manners of his learned and celebrated friend."

In 1775 he travelled into France, with Mr. and Mrs. Thrale: and Foote, who happened to be at Paris at the same time, said, that the French were quite astonished at his figure and manner, and at his dress, which was exactly the same with what he was accustomed to wear in London. It was this year that he published his *Taxation no Tyranny*, an Answer to the Resolutions and Address of the American Congress. This pamphlet contained the same arbitrary principles with his former political pieces, and the grossest and most virulent abuse of the Americans,

In 1779, when he was seventy years of age, he published his *Lives of the Poets*. These considered as compositions, possess a very high degree of merit, and contain a great variety of acute and admirable reflections; but they are often very far from containing just, candid, or impartial accounts concerning whom he wrote. Bishop Newton says, "Never was any biographer more sparing of his praises, or more abundant in his censures. He seemingly delights more in exposing blemishes than in recommending

beauties ; slightly passes over excellences, and enlarges upon imperfections."

Dr. Johnson died at his house in Bolt Court, Fleet Street, on the 13th of September, 1784, in the 75th year of his age, and was interred in Westminster Abbey. The following character has been given of him by Mr. Boswell in his journal of their tour to the Hebrides : " Dr. Samuel Johnson's character, religious, moral, political, and literary, nay, his figure and manner, are, I believe, more generally known than those of almost any man ; yet it may not be superfluous here to attempt a sketch of him. Let my readers then remember that he was a sincere and zealous Christian of the high church of England, and monarchical principles, which he would not tamely suffer to be questioned ; steady and inflexible in maintaining the obligations of piety and virtue, both from a regard to the order of society, and from a veneration to the great source of all order ; correct, nay stern in his taste ; hard to please, and easily offended ; impetuous and irritable in his temper, but of a most humane and benevolent heart ; having a mind stored with a vast and various collection of learning and knowledge, which he communicated with peculiar perspicuity and force, in rich and choice expression. He united a most logical head with a most fertile imagination, which gave him an extraordinary advantage in arguing ; for he could reason close or wide, as he saw best for the moment. He could, when he chose it, be the greatest sophist that ever wielded a weapon in the schools of declamation ; but he indulged this only in conversation, for he owned he sometimes talked for victory : he was too conscientious to make error permanent and pernicious by deliberately writing it. He was conscious of his superiority. He loved praise when it was brought to him, but was too proud to seek for it. He was somewhat too susceptible of flattery. His mind was so full of imagery that he might have been perpetually a poet. It has been often remarked, that in his poetical pieces, which it is to be regretted are so few, because so excellent, his style is easier than in his prose. There is deception in this ; it is not easier, but better suited to the dignity of verse ; as one may dance with grace, whose motions to ordinary walking, in the common step, are awkward. He had a constitutional melancholy, the clouds of which darkened the brightness of his fancy, and gave a gloomy cast in his whole course of thinking : yet, though grave and awful in his deportment,

when he thought it necessary or proper, he frequently indulged himself in pleasantry and sportive sallies. He was prone to superstition, but not to credulity. Though his imagination might incline him to a belief of the marvellous and mysterious, his vigorous reason examined the evidence with jealousy. He had a loud voice, and a slow deliberate utterance, which no doubt gave some additional weight to the sterling metal of his conversation. Lord Pembroke said once to me at Wilton, with a happy pleasantry and some truth, that ‘ Dr. Johnson’s sayings would not appear so extraordinary were it not for his *bow-wow way*.’ But I admit the truth of this only on some occasions: the Messiah played upon the Canterbury organ is more sublime than when played upon an inferior instrument; but very slight music will seem grand when conveyed to the ear through that majestic medium. While, therefore Dr. Johnson’s sayings are read, let his manner be taken along with them. Let it, however be observed, that the sayings are generally great; that, though he might be an ordinary composer at times, he was for the most part a Handel. His person was large, robust, I may say approaching to the gigantic, and grown unwieldy from corpulency. His countenance was naturally of the cast of an ancient statue, but somewhat disfigured by the scars of that evil, which it was formerly imagined the royal touch could cure. He was now in his sixty-fourth year, and was become a little dull of hearing. His sight had always been somewhat weak; yet so much does mind govern and ever supply the deficiency of organs, that his perceptions were uncommonly quick and accurate. His head, and sometimes his body, shook with a kind of motion like the effect of a palsy: he appeared to be frequently disturbed by cramps or convulsive contraction, of the nature of that distemper called St. Vitus’s dance. He wore a full suit of plain brown clothes, with twisted hair buttons of the same colour, a large bushy greyish wig, a plain shirt, black worsted stockings, and silver buckles. Upon his tour, when journeying, he wore boots and a very wide brown cloth great coat, with pockets which might have held the two volumes of his folio dictionary; and he carried in his hand a large English oak stick. Let me not be censured for mentioning such minute particulars. Every thing relative to so great a man is worth observing. I remember Dr. Adam Smith, in his rhetorical lectures at Glasgow, told us he was glad to know that Milton wore latchets in his shoes instead of buckles.”

The works of Dr. Johnson were published together in eleven volumes, octavo, in 1787, and some additional volumes have since been added. Two volumes, octavo, of letters to and from him, have also been published by Mr. Piozzi.

NELSON.

HORATIO NELSON, the son of the Rev. Edmund Nelson, was born at Burnham Thrope, in Norfolk, September 29, 1758. At an early period he declared his choice of a sailor's life. When he was only twelve years old, being at home during the Christmas holidays, he read in the country newspaper that his uncle, Captain M. Suckling, was appointed to the *Raisonable*, of 64 guns. "Do, William," said he to a brother, who was a year and a half older than himself, "write to my father, and tell him that I should like to go to sea with uncle Maurice." Mr. Nelson was then at Bath, whither he had been for the recovery of his health: his circumstances were straitened, and he had no prospect of ever seeing them bettered; he knew that it was the wish of providing for himself by which Horatio was chiefly actuated, and did not oppose his resolution; he understood also the boy's character, and had always said, that in whatever station he might be placed, he would climb to the top of the tree. Accordingly Captain Suckling was written to. "What," said he, in his answer, "has poor Horatio done, who is so weak, that he above all the rest should be sent to rough it out at sea? But let him come, and the first time we go into action a cannon ball may knock off his head, and provide for him at once."

Soon after he was taken from school to serve under his uncle, but as the latter commanded only a guard ship in the Thames, he was sent, in 1771, to the West Indies in a merchantman. He next sailed with Commodore Phipps, on a voyage of discovery towards the north pole. Afterwards he engaged on board the squadron of Sir Edward Hughes, destined for the East Indies. Thence he returned, debilitated in body and depressed in spirits, "to die at home"—but he had not yet earned his grave under the dome of St. Paul's.

In 1780, having recovered strength enough again to brave death abroad, he was appointed to serve in the

West Indies, where his adventures were of the most romantic kind, but our limits will not permit the detail of them. A second time he returned to England a living skeleton, and went to Bath, where he was so helpless that he was carried to and from his bed. Indeed Nelson was a great sufferer from his infancy; not having like Charles XII. of Sweden, "a frame of adamant," yet like him having "a soul of fire," his frail body was perpetually harassed and wasted by the restless spirit within, that was impatient of confinement, and often on the eve of escaping. But from his bed of sickness, or rather on it, he was sent as captain of the *Albermarle*, to suffer the rigours of a northern winter in the Baltic; and when he had undergone that seasoning he was ordered to Canada. Thence he passed to the West Indies, where he became acquainted with Prince William Henry (now Duke of Clarence) then serving under Lord Hood: from that time the prince was a friend to him through life. In 1783, after a short visit to France, Nelson was a third time stationed in the West Indies, where he found himself senior captain, under Sir Edward Hughes, and consequently second in command. We must not enter into the details of his public spirited conduct in resisting the illegal practices of American interlopers and faithless government contractors. He served his country most daringly and disinterestedly; for which he was happy to escape ruin and a prison for life, instead of thanks and remuneration. Indeed from the very outset of Nelson's career to his last expedition, the ministers of government seem to have been always slow, and sometimes reluctant, to reward his merits.

It was here, in 1787, he saw and loved, and married Mrs. Nisbet, the daughter of a physician in the island of Nevis. The purity and ardour of his attachment to this lady are glowingly displayed in the following extracts from letters written to her during his occasional absence. "We are often separate," said he, in a letter to her a few months before their marriage, "but our affections are not by any means on that account diminished: our country has the first demand for our services, and private convenience or happiness must ever give way to the public good."—"To write letters to you," says he, in another letter, "is the next greatest pleasure I feel to receiving them from you. What I experience when I read such as I am sure are the pure sentiments of your heart, my poor pen cannot express—nor indeed would I give much for any pen or head which could express feelings of that kind. Absent from you I feel no

pleasure ; it is you who are every thing to me. Without you I care not for this world ; for I have found lately nothing in it but vexation and trouble. These are my present sentiments. God Almighty grant they may never change ! nor do I think they will." It is lamentable that the constancy of a passion so noble did not equal its intensity.

In the earlier period of the French revolutionary war, Nelson accompanied Lord Hood to Toulon, and was subsequently employed by that commander on an embassy to Naples, where he first saw Sir William and Lady Hamilton. Sir William, after his first interview with him, told his lady that he was about to introduce a little man to her who could not boast of being very handsome ; but such a man as he believed would one day astonish the world. " I have never before," continued he, " entertained an officer at my house, but I am determined to bring him here ; let him be put in the room prepared for Prince Augustus." Thus that acquaintance began which ended in the destruction of Nelson's domestic happiness ; though it seemed to threaten no such consequences in its commencement. He spoke of Lady Hamilton, in a letter to his wife, as a young woman of amiable manners, who did honour to the station to which she was raised.

We pass over the exploits of Nelson at Sardinia, Corsica, and on the coast of Italy, under Admiral Hotham ; his labours there alone, if he had afterwards achieved no greater things, would have been sufficient to entitle him to rank among the first of British captains, though they were but the commonplace incidents of his life. Amidst all disheartening, appalling, and obstructing contingencies, he pressed right onward in his course of honour.

In 1795 we find him, as Commodore Nelson, still in the Mediterranean with Sir John Jervis. In the battle of St. Vincent, from which the commander in chief derived his title of nobility, our hero distinguished himself by prodigies of enterprising valour. These revealed his name at once in the splendour which it had long been lying behind a cloud of untoward circumstances, and this country gazed on her proudest luminary, already at the meridian, with as much wonder as if it had been unknown, and had just arisen.

Nelson afterwards undertook the desperate expedition against Teneriffe. This was one of the few instances in which consummate skill and unconquerable spirit failed to accomplish his end. He returned to England with the loss

of an eye, and of his right arm. Here he was invested with the Order of the Bath, and received a pension of £1000 a year. The memorial which, as a matter of form, he was called upon to present on the occasion, exhibited an extraordinary catalogue of services performed during the war. It stated "that he had been in four actions with the fleets of the enemy, and in three actions with boats employed in cutting out of harbour, in destroying vessels, and in taking three towns; he had assisted at the capture of seven sail of the line, six frigates, four corvettes, and eleven privateers; taken and destroyed near fifty sail of merchant vessels; and actually been engaged against the enemy upwards of a hundred and twenty times; in which service he had lost a right eye and a right arm, and been severely wounded and bruised in his body."

Early in 1798 Nelson, now an admiral, rejoined Earl St. Vincent in the Mediterranean. When Buonaparte sailed with an immense armament from Toulon on an unknown expedition, Nelson was dispatched in quest of him. Had these two men encountered, the history of Europe for the last sixteen years might have been different from what it is. Nelson's little fleet was dispersed by a storm, off the coast of Sardinia, which delayed the pursuit. His own ship, the *Vanguard*, was probably rescued from destruction in spite of himself, by Captain Ball, who resolutely took it in tow, and carried the admiral safe into Sardinia. This was an act of disobedience after Nelson's own heart, though committed against his own orders, and from that time he and Ball, who had been cool before, became perfectly cordial towards one another. The following passage of a letter written on this occasion to his wife strikingly exhibits the peculiarity of his mind: "I ought not," says he, "to call what has happened to the *Vanguard* by the cold name of accident; I verily believe it was the Almighty's goodness to check my consummate vanity. I hope it has made me a better officer, as I feel confident it has made me a better man. Figure to yourself on Sunday evening at sunset a vain man walking in his cabin, with a squadron around him, who looked up to their chief to lead them to glory, and in whom their chief placed the firmest reliance, that the proudest ships of equal numbers belonging to France would have lowered their flags—figure to yourself, on Monday morning, when the sun rose, this proud man, his ship dismasted, his fleet dispersed, and himself in such distress, that the meanest frigate out of France would have been an unwelcome guest."

While he was refitting at Sardinia, he was reinforced by eleven ships of the line, and then for the first time in his life he found himself at the head of a magnificent armament, well appointed, worthy of its commander, and prepared for any service, however dreadful, to which he might lead it. Unfortunately his frigates had been separated in the storm, and could not afterwards rejoin the fleet. This was like the loss of his eyes to him, and his subsequent pursuit of the French to Egypt, back to Naples, and thence to Egypt again, was a chase in the dark for want of these light and swift vessels to look out perpetually and on every hand for the enemy. That enemy at length he found in the port of Alexandria; and on the first of August a dreadful conflict ensued. Nelson found the French fleet moored in a strong line across the Bay of Aboukir, and in a position which the French admiral thought perfectly secure. He ordered an immediate attack, and by dexterously sending a part of his ships between the enemy's fleet and the shore, attacked it on both sides at once, ship after ship in succession. A complete victory was the consequence; nine ships of the line were taken, and two burnt; one of which was *L'Orient*, the French admiral's, who was killed in the engagement. However complete this victory was, Nelson could not pursue it as he would have done for want of means. Had he been provided with small craft, nothing could have prevented the destruction of the store-ships and transports in the port of Alexandria—four bomb-vessels would at that time have burnt the whole in a few hours. “Were I to die this moment,” said he, in his dispatches to the admiralty, “*want of frigates* would be stamped on my heart. No words of mine can express what I have suffered and am still suffering for want of them.” Such is the price which the hero must pay for the glory of inflicting death on his fellow-creatures, such comparatively small disappointments produce in his own mind inexpressible anguish. Nevertheless Nelson had achieved a great deliverance; not only Europe, but even India felt relieved from a burden of fear too horrible to be endured. The Grand Seignior, and the King of Naples, were the first monarchs to reward him with honours and endowments, At home he was created Baron Nelson of the Nile, and a pension of £2000 a year for three lives was conferred upon him. Meanwhile, at Naples, he tarnished the lustre of his victory in Egypt. He fell into the toils of Lady Hamilton; and equally intoxicated with passion and pride, acted unworthily, and even cruelly, as the executioner of Neapolitan vengeance

on those subjects of the king, who had been compelled or seduced by French violence or craft, to violate their allegiance. Lady Hamilton, who from this time so greatly influenced his future life, was a woman whose personal accomplishments have seldom been equalled, and whose powers of mind were not less fascinating than her person. During the long interval which had passed before any tidings were received of the victory at Aboukir, she and Sir William had literally been made ill by their hopes and fears; and when tidings were brought by a joyful bearer, oopen mouthed, the effect was such that she fell like one who had been shot. The admiration of the hero necessarily produced a degree of proportionate gratitude and affection; and when their barge came alongside the Vanguard, at the sight of Nelson, Lady Hamilton sprang up the ship's side, and exclaiming, "O God! is it possible!" fell into his arms—more, he says, like one dead than alive. He described the scene as "terribly affecting."

But amidst all the delirium of glory and adulation that bewildered his senses, Nelson was a most unenviable being. In a letter addressed to his old friend, Mr. Alexander Davison, he says, "Believe me, my only wish is to sink with honour into the grave; and when that shall please God, I shall meet death with a smile. Not that I am insensible to the honours and riches my king and country have heaped upon me—so much more than an officer could deserve; yet I am ready to quit this world of trouble, and envy none but those of the estate *six feet by two*."

In 1800 Nelson returned to England, where he had every earthly blessing except domestic happiness; he had forfeited that for ever. Before he had been three months at home, he was separated from Lady Nelson. Some of his last words to her were, "I call God to witness, there is nothing in you or your conduct I wish otherwise." This was the consequence of his infatuated attachment to Lady Hamilton. It had before caused a quarrel with his son-in-law, and occasioned remonstrances from his true friends, which produced no other effect than that of making him displeased with them, and more displeased with himself.

In the spring of 1801 he was appointed second in command to Sir Hyde Parker, over a fleet sent to the Baltic, to chastise Denmark, Sweden, and Russia, for a coalition with France against the maritime rights of Great Britain. The fleet sailed on the 12th of March. Mr. Vansittart sailed in it; the British cabinet still hoping to obtain its

The Young Man's Companion; PART

end by negotiations. On the 21st Nelson had a long conference with Sir Hyde; and the next day addressed a letter to him, worthy of himself and of the occasion. Mr. Vanzittart's report had been received. It represented the Danish government as in the highest degree hostile, and their state of preparation as exceeding what our cabinet had supposed possible; for Denmark had profited with all activity of the leisure which had so impolitically been given her. More time was lost before it could be decided whether to take the passage of the Belt or of the Sound. At length orders were given to pass the Sound, and on the afternoon of the 29th the ships were cleared for action with an alacrity characteristic of British seamen. At daybreak on the 30th it blew a top-sail breeze from N. W. The signal was made, and the fleet moved in order for battle; Nelson's division in the van, Sir Hyde's in the centre, and Admiral Grave's in the rear. The whole force consisted of fifty-one sail, of various descriptions, of which sixteen were of the line.

The plan upon which Nelson had determined to act, if ever it should be his fortune to bring a Baltic fleet to action, was to attack the head of their line, and to confuse their movements—"Close with a Frenchman," he used to say, "but out-manceuvre a Russian." He offered his services for the attack, requiring ten sail of the line, and the whole of the smaller craft. Sir Hyde gave him two more line of battle ships than he asked, and left every thing to his judgment. The enemy's force, which was very large, was not the only obstacle with which the British fleet had to contend, as the channel was extremely intricate, and little known. At five minutes after ten the action began. The first half of our fleet was engaged in about half an hour; and by half-past eleven the battle became general. The plan of attack had been complete; but seldom has any plan been more disconcerted by untoward accidents. Of twelve ships of the line, one was entirely useless, and two others in a situation where they could render little service. Of the squadron of gun-brigs and bomb-vessels three only reached their appointed station. The commander in chief, who was near enough to know the unfavourable circumstances which had weakened Nelson, but too distant to know the real state of the contending parties, or to afford Nelson any assistance, and thinking it became him to save what he could from the hopeless contest, made the signal for retreat. Nelson, who was pacing the quarter-deck in all the excitement of action, was asked by the signal officer

if he should repeat it. "No," he replied, "acknowledge it." Presently he called after him, to know if the signal for close action was still hoisted; and being answered in the affirmative, said, "Mind you keep it so." He now paced the deck, moving the stump of his lost arm in a manner that always indicated great emotion. "Do you know," said he to one of his officers, "what is shewn on board the commander in chief? No. 39?" The officer asked what that meant—"Why, to leave off action." Then, shrugging up his shoulders, he repeated the words—"Leave off action! Now, d—n me if I do. You know, Foley," turning to the captain, "I have only one eye—I have a right to be blind sometimes:" then putting the glass to his blind eye, in that mood of mind which sports with bitterness, he exclaimed, "I really do not see the signal! D—n the signal! Keep mine for closer battle flying! That's the way I answer such signals! Nail mine to the mast!" The other ships of the line looking only to Nelson, continued the action with unabated vigour. Denmark had never been engaged in so arduous a conflict, and never did the Danes more nobly display their national courage; but between one and two their fire slackened, and about two it ceased from the greater part of their line. It was, however, difficult to take possession of those who struck, because the batteries protected them, and many of the boats which approached for this purpose were fired upon. Hoping to save this unnecessary effusion of blood, Nelson wrote a spirited letter to the Crown Prince; in consequence of which a negotiation took place, which ended in the surrender of most of the enemy's fleet, and finally in a peace with Denmark. After the battle, he said, "Well, I have fought contrary to orders, and I shall perhaps be hanged. Never mind: let them!" But his services had been too eminent, his judgment too conspicuous, his success too signal, for his commander to express any thing but satisfaction that day. On his return home he was created a Viscount.

His next expedition was not of his own choosing, nor in his own style. It was a sanguinary and disastrous attack on the French gun-boats at Boulogne, in which his usual skill and intrepidity were displayed, but without his customary success.

After the peace of Amiens, Nelson retired to a house which he had purchased at Merton, in Surry, meaning to pass his days there with Sir William and Lady Hamilton

Sir William did not long survive. He expired in his wife's arms, holding Nelson by the hand, and almost in his last words left her to his protection.

On the renewal of hostilities Nelson took the command of the blockading fleet off Toulon. On this station he continued more than two years, during which period he went on shore thrice only, each time on the king's business, and for not more than an hour.

In January 1805, the French fleet escaped out of Toulon, and joining the Spanish, sailed for the West Indies. Nelson was then at Sardinia, and though scarcely twenty-four hours behind them at the outset, so uncertain are operations at sea, that he pursued them in vain to Malta, to Barbary, through the Straits of Gibraltar, across the Atlantic, and back to Spain. From this unparalleled chase of more than seven thousand miles full speed (after a stagnation of blockade for eight and twenty months) Nelson returned to England in August; worn out by fatigue, depressed by anxiety, and irritated by ill success. On landing at Portsmouth he received certain intelligence of the return of the combined fleets to Europe. Sir Robert Calder had encountered them west of Cape Finisterre, with an inferior force; had defeated them, and taken two ships of the line. He hurried away to Merton, to hide his sorrows with Lady Hamilton. But he was more miserable in retirement than he had been in the agony and paroxysm of grief and disappointment. Lady Hamilton, perceiving the internal suffering that consumed him amidst affecting cheerfulness, seconded his secret desire, though she appeared to prompt it, by conjuring him again to offer his services to government. He did so; his tender was accepted, and Nelson once more left his native country to take the command of a fleet destined to achieve the greatest naval victory on record. He arrived off Cadiz on the 29th of September, his birth-day; the station which he had chosen was some fifty of sixty miles to the west of that city, near Cape St. Mary's. At this time he was not without some cause of anxiety; he was in want of frigates—the eyes of the fleet, as he always called them. The order of sailing was to be the order of battle; the fleet in two lines, with an advanced squadron of eight of the fastest sailing two-deckers. The second in command, having the entire direction of his line, was to break through the enemy about the twelfth ship from the rear: he would lead through the centre, and the advanced squadron was to cut off three or four a-head of the centre.

For a long time he anxiously sought the enemy without effect; but on the 19th of October he received the gratifying intelligence that they had put to sea, and at day break, on the 21st of October, the hostile fleets came in sight of each other in the vicinity of Cape Trafalgar. Our fleet consisted of twenty-seven sail of the line and four frigates; their's of thirty-three, and seven large frigates. Their superiority was greater in size and weight of metal than in numbers.

Nelson, certain of a triumphant issue to the day, asked Captain Blackwood what he should consider as a victory. That officer answered, that, considering the handsome way in which battle was offered by the enemy, their apparent determination for a fair trial of strength, and the situation of the land, he thought it would be a glorious result if fourteen were captured. He replied, "I shall not be satisfied with less than twenty." Soon after the signal was made, a signal which will be remembered as long as the language, or even the memory of England shall endure—Nelson's last signal—"England expects every man to do his duty!" It was received throughout the fleet with a shout of answering acclamation, made sublime by the spirit which it breathed, and the feeling which it expressed. He wore that day, as usual, his admiral's frock coat, bearing on the left breast four stars of the different orders with which he was invested. Ornaments which rendered him so conspicuous a mark for the enemy were beheld with ominous apprehensions by his officers; but they knew it was in vain to entreat him to change his dress or cover the stars. The French admiral, Villeneuve, had made his own dispositions with the utmost skill; and the fleet under his command waited for the attack with perfect coolness. Ten minutes before twelve they opened the fire. Admiral Collingwood, in the *Royal Sovereign*, steered right for the centre of the enemy's line, cut through it astern of the *Santa Anna*, three decker, and engaged her at the muzzle of her guns on the starboard side. Nelson ordered the *Victory* to be steered to the bow of the *Santissima Trinidad*; mean time an incessant raking fire was kept up upon the *Victory*, which had not yet returned a single shot; fifty of her men had by this time been killed or wounded, and her main-top-mast, with all her studding sails and their booms, shot away. At four minutes past twelve she opened her fire from both her decks. It was not possible to break the enemy's line without running on board one of their ships. Accordingly the *Victory* ran on board

the Redoubtable just as her tiller ropes were shot away. The French ship received her with a broadside; then instantly let down her lower deck ports, for fear of being boarded through them, and never afterwards fired a great gun during the action.

It had been part of Nelson's prayer before the action, that the British fleet might be distinguished by humanity in the victory which he expected. Setting an example himself, he twice gave orders to cease firing on the Redoubtable, supposing that she had struck, because her great guns were silent: for, as she carried no flag, there was no means of instantly ascertaining the fact. From this ship, which he had thus twice spared, he received his death. A ball fired from the mizen-top, which in the then situation of the two vessels was not more than fifteen yards from that part of the deck where he was standing, struck the epaulette on his left shoulder—about a quarter after one, just in the heat of the action. Captain Hardy, who was a few steps from him, turning round saw three men raising him up. "They have done for me at last, Hardy," said he. "I hope not!" cried Hardy. "Yes," he replied, "my back-bone is shot through." Yet even now, not for a moment losing his presence of mind, he observed, as they were carrying him down the ladder, that the tiller ropes, which had been shot away, were not yet replaced; and ordered that new ones should be rove immediately—then, that he might not be known by the crew, he took out his handkerchief and covered his face and his stars. Had he but concealed those badges of honour from the enemy, England, perhaps, would not have had cause to receive with sorrow the news of the battle of Trafalgar.

It was soon perceived, upon examination, that the wound was mortal, and he became impatient to see Captain Hardy. When that officer, who had been often sent for and who could not before leave the deck, at length came, they shook hands in silence, Hardy in vain struggling to suppress the feelings of that most painful moment. "Well, Hardy," said Nelson soon after, "how goes the day with us?"—"Very Well," replied Hardy; "ten ships have struck."—"I am a dead man, Hardy," said he; "I am going fast—it will be all over with me soon. Come nearer to me. Let my dear Lady Hamilton have my hair, and all other things belonging to me." Captain Hardy assured him his request should be attended to, then once more shook hands with him; and, with a heart almost bursting, hast-

ened upon deck. About fifty minutes after he returned and again taking the hand of his dying friend and commander, congratulated him on having gained a complete victory. How many of the enemy were taken he did not know, as it was impossible to perceive them distinctly but fourteen or fifteen at least. "That's well," cried Nelson; "but I bargained for twenty." And then in a stronger voice he said, "Anchor, Hardy, anchor." Hardy upon this hinted that Admiral Collingwood would take upon himself the direction of affairs. "Not while I live," said the dying Nelson, endeavouring to raise himself from the bed: "do you anchor." His previous order for preparing to anchor had shewn how clearly he saw the necessity of this. Presently calling Hardy back, he said to him in a low voice, "Don't throw me over board;" and he desired that he might be buried by his parents, unless it should please the king to order otherwise. Then reverting to private feelings, added, "Take care of my dear Lady Hamilton, Hardy; take care of poor Lady Hamilton! Kiss me, Hardy," said he. Hardy knelt down and kissed his cheek; and Nelson said, "Now I am satisfied. Thank God, I have done my duty!" Hardy stood over him in silence for a minute or two; then knelt again. "Who is that," said Nelson; and being informed, he replied, "God bless you, Hardy." Hardy then left him—for ever. His articulation now became difficult; but he was distinctly heard to say, "Thank God, I have done my duty!" These words he had repeatedly pronounced, and they were the last words which he uttered. He expired at thirty minutes after four—three hours and a quarter after he had received his wound.

The total loss of the British in this memorable engagement amounted to 1587. Twenty of the enemy's ships struck—unhappily the fleet did not anchor, as Nelson almost with his dying breath had enjoined; a gale came on from the south-west; some of the prizes went down; some went on shore; one effected its escape into Cadiz; others were destroyed; four only were saved, and these by the greatest exertions. The wounded Spaniards were sent ashore, an assurance being given that they should not serve till regularly exchanged; and the Spaniards, with a generous feeling, which would not perhaps be found in any other people, offered the use of their hospitals for our wounded, pledging the honour of Spain that they should be carefully attended there. The Spanish vice-admiral, Alava, died of his wounds,

The French admiral, Villeneuve, was sent to England, and permitted to return to France, where he soon after died.

It is almost superfluous to add, that all the honours which a grateful country could bestow were heaped upon the memory of Nelson. His brother was made an earl, with a grant of £6000 a year; £10,000 were voted to each of his sisters; and £100,000 for the purchase of an estate. A public funeral was decreed, and a public monument. Statues and monuments also were voted by most of our principal cities. The leaden coffin in which he was brought home was cut in pieces, which were distributed as relics of Saint Nelson—so the gunner of the Victory called them—and when at his interment his flag was about to be lowered into the grave, the sailors who assisted at the ceremony with one accord rent it in pieces, that each might preserve a fragment while he lived. The victory of Trafalgar was celebrated with the usual forms of rejoicing: but they were without joy; for such already was the glory of the British navy, that even this signal victory seemed forgotten in the consideration of the price by which it was purchased.

Nelson was a man of a most original and comprehensive genius; his energies, matured, experienced, concentrated, were incessantly directed to one point; and his amazing mind, inflamed by unbounded ambition, yet awed by a peculiar sense of religion, that rather haunted than governed him—exalted by enthusiastic patriotism—exasperated by remorseless hostility to France—rendered romantic by his insane attachment to Lady Hamilton—and latterly supported by the power and purse of the nation—at length accomplished all his heart's desire. With his death closed the most splendid era of the naval history of this country. It will be an age before there is *work* for another NELSON

THE
YOUNG MAN'S COMPANION;
OR,
YOUTH'S INSTRUCTOR.

PART IX.
CHRONOLOGY.

CHRONOLOGY

CHRONOLOGY is that science which treats of the artificial divisions of time, and teaches us to adapt them to past transactions, in order to illustrate history. Chronology and geography have been termed the “eyes of history,” so closely connected are these three branches of knowledge. In order to make any regular progress in learning, some acquaintance with chronology is indispensable. To pretend to read history, the source and treasure of civil as well as sacred knowledge, without attending to chronology, would be to little or no purpose: to chronology, history owes its use and beauty.

EPOCHS AND ERAS.

TIMES are distinguished under various epochs and eras.

An epoch or epocha is a point of time that begins with eras, and concludes with some remarkable change of things. The first epoch of time, for instance, is said to have been that space which intervened between Adam and the flood; the second is from the flood to the days of Abraham.

An era is a particular date or period, whence a series of years is computed: its origin is contested, though generally allowed to have had its rise in Spain. Sepulveda supposes it formed from *A. ER. A.* the note of abbreviation of the words, *Annus ERat Augusti*, occasioned by the Spaniards beginning their computation from the time their country came under the dominion of Augustus, or that of receiving the Roman calendar. This opinion is rejected by Scaliger; Vossius nevertheless favours the conjecture.

Different epochas or eras obtain in different nations ; the understanding of which is indispensable to the student. We shall briefly notice the principal of these divisions of time.

ERA OF THE OLYMPIADS

This method of computation had its rise from the Olympic games, which were celebrated every fifth year, near the city of Olympia, in Peloponnesus. The first Olympiad commenced, according to some chronologers, in the year 3938 of the Julian period ; the year from the creation 3174 ; the year before Christ 774 ; and 24 years, some will have 23 years, before the building of Rome. The Olympiads were also called *anni Iphiti*, from *Iphitus*, who instituted or at least renewed the solemnity of the Olympic games. We do not find any computation by Olympiads after the 364th, which ended with the year of Christ 440, except that in a charter of our King Ethelbert, the years of his reign are said to be reckoned by Olympiads. This method of reckoning was followed by the ancient Greeks.

ERA OF THE BUILDING OF ROME.

This era took place A. M. 3197, and B. C. 752 or 753. This also has been called the Varronian epocha, being first introduced by Terrentius Varro. The ancient Roman historians usually follow this epocha, which is referred to thus, A. U. C. (that is, *anno urbis conditæ*, or the year of building the city.)

The eras or epochas, however, which are now chiefly in use or referred to, are the following, namely :

EPOCHA OF THE CREATION OF THE WORLD.

The number of the years that elapsed from the creation to the birth of our Saviour, has never yet been satisfactorily ascertained by chronologers. It may here suffice to say, that the system now most generally received is that of Archbishop Usher ; who follows the computation of the Hebrew Bible, and fixes the creation of the world at 4000 years before the birth of Christ.

CHRISTIAN ERA.

This was not fully settled till the year 527 ; when Dionysus Exiguus, a Roman abbot, fixed it to the 4713th year of

the Julian period, which was four years too late. It is however now so generally received, that this gross error in calculation is but seldom regarded.

ERA OF THE FRENCH REVOLUTION.

As this era is constantly referred to by French writers, during the period that France was under republican government, a few particulars concerning it may assist the reader's historical studies.

The era in question was substituted for the vulgar or Christian era in all public and civil instruments, by virtue of the decree issued by the national convention, on the 5th of October, 1793. It commenced with the epocha of the foundation of the republic, that is, on the 22nd of September, 1792 of the vulgar era; on the morning of which day the sun arrived at the true autumnal equinox, at 18 minutes and 30 seconds past nine o'clock (Paris time.) This era was abolished by Buonaparte, and the Christian era has been re-established since the commencement of 1806.

DIVISIONS OF TIME.

CHRONOLOGERS have made use of two different sorts of years, the one taken from the course of the sun, the other from that of the moon. The first, called a solar year, is again divided into two; one of them is exact, and measures the entire course of the sun; it is called a tropical year, because it begins with the solstice, and determines in 365 days and the fourth part of a day nearly. The other is called a civil year, less accurate than the former, and subservient to popular uses.

The lunar year contains 354 days. This kind of year is now in use among the Arabians, Turks, and Saracens.

There are other marks and characters of time, or chronological terms, which ought to be explained, as cycle, epacts, &c. on account of their frequent use in history.

CYCLE.

A cycle is a perpetual circulation and recurrence of the same parts of time. The origin of cycles was thus:—

The apparent revolution of the sun round the earth has been arbitrarily divided into 24 hours ; the basis or foundation of all our mensuration of time. Civil use knows none but hours ; or rather multiples of hours, as days and years. But neither the annual motion of the sun, nor that of the other heavenly bodies, can be measured exactly, and without any remainder, by hours, or their multiples. That of the sun is 365 days, 5 hours, 49 minutes, nearly. That of the moon, 29 days, 12 hours, 44 minutes. Hence, to swallow up these fractions in whole numbers, and yet in numbers which only express days and years, cycles have been invented ; which, comprehending several revolutions of the same body, replace it after a certain number of years in the same points of the heavens whence it first departed ; or which is the same thing, in the same place of the calendar.

Such is the famous cycle of 19 years, called also the cycle of the moon, or lunar cycle, a period of 19 solar years ; equivalent to 19 lunar years, and seven intercalary months ; in which time the new and full moons are supposed to return to the same day of the Julian year.

This is also called the Metonic period, from its inventor Meton, the Athenian ; and the golden number : though, in propriety, the golden number is rather the particular number which shews the year of the lunar cycle any given year is in. This cycle of the moon only holds true for 312 years : for though the new moons do return to the same day after 19 years ; yet not to the same time of the day, but nearly an hour and a half sooner : which error, in 312 years, amounts to an entire day. Yet those employed in reforming the calendar went on a supposition of the lunations returning precisely from 19 to 19 years for ever.

The use of this cycle in the ancient calendar, is to shew the new moon in each year, and the time of Easter. In the new one it only serves to find the epacts ; which shew, in either calendar, that the new moons fall 11 days too late.

The cycle of the sun, or solar cycle, is a revolution of 28 years : beginning with 1, and ending with 28 ; which being elapsed, the dominical or Sunday letters, and those that express the other feast &c. return into their former place, and proceed in the same order as before. It is called solar cycle, not with regard to the sun's course, which has nothing to do herein ; but from Sunday, anciently called *dies solis*, the day of the sun : because the dominical letter is

principally sought for from this revolution; the dominical letters of which are the first in the alphabet, having been substituted in lieu of the nundinal letters of the Romans.

The reformation of the calendar under Pope Gregory occasioned a considerable alteration of this cycle; in the Gregorian calendar the solar cycle is not constant and perpetual, because every fourth secular year is common; whereas in the Julian it is bissextile. The epocha or beginning of the solar cycle, both Julian and Gregorian, is the ninth year before Christ.

A *Julian year* is a solar year, containing, commonly, 365 days; though every fourth year, called bissextile, contains 366. The astronomical quantity, therefore, of the Julian year is 365 days, six hours, which exceeds the true solar year by eleven minutes; which excess in 131 years amounts to a whole day. And thus the Roman year stood, till the reformation made therein by Pope Gregory.

EPACTS.

The epact is the number of days added to the lunar, to make it equal to the solar, year.

The epacts, then, are either annual or menstrual.

Hence, as the Julian year is 365 days, six hours, and the Julian lunar year 354 days, 8 hours, 41 minutes, 38 seconds; the annual epact will be 10 days, 21 hours, 11 minutes, 22 seconds; that is, nearly 11 days. Consequently, the epact of two years is 22 days; of three years, 33 days; or rather three, since 30 days make an embolismic, or intercalary month.

Thus, the epact of 4 years is 14 days; and so of the rest: and thus, every 19th year the epact becomes 30 or 0; consequently the 20th year the epact is 11 again; and so the cycle of epacts expires with the golden number, or lunar cycle of 19 years, and begins again with the same.

MONTHS AND DAYS.

JANUARY is the first month in the year among the western nations. The word is derived from *Januarius*, a name given it by the Romans, from *Janus*, one of their divinities, to whom they attributed two faces; because on the one side the first of January looked towards the new year, and on the other towards the old one. The word *Januarius* may also be derived from *janua*, a gate; for the first month is

as the gate of the year. Numa Pompilius made January the first month, Romulus' year beginning in the month of March.

FEBRUARY is derived from *februa*, an old Latin word ; for, from the very foundation of the city, we meet with *februa* for purification ; and *februare*, to purge or purify. In this month the Romans held a feast in behalf of the manes of the deceased ; and Macrobius tells us, that in this month also sacrifices were performed, and the last offices were paid to the defunct.

MARCH, the third month according to our computation, was considered as the first by some of the ancients, and by others as the third, fourth, or fifth, and even the tenth month of the year. Romulus named it after his supposed father, Mars, and appointed it as the first month of the year.

APRIL (in Latin *Aprilis*) is derived from *aperio*, I open ; because the earth in this month begins to open her bosom for the production of vegetables.

MAY, the fifth month, was called *Maius*, by Romulus, from respect to the senators and nobles of the city, who were named *Majores* : though others say it was so called from *Maia*, the mother of Mercury, to whom they offered sacrifice in this month.

JUNE, by the Romans called *Junius*, in honour of the Roman youth who served *Romulus* in war : some derive the word *Junius* from *Junio*.

JULY is the seventh month ; the word is derived from the Latin *Julius*, the surname of C. Cæsar, the dictator, who was born in this month. Marc Antony first gave this month the name of July, which was before called *Quintilis*, as being the fifth month of the year in the old Roman calendar. For the same reason August was called *Sextilis* ; and September, October, November, and December, still retain their original names.

AUGUST, in a general sense, implies something majestic, and the appellation was first conferred on Octavius by the Roman senate. Octavius, then named Augustus Cæsar, was in this month created consul ; he had thrice triumphed in Rome, subdued Egypt to the Roman empire, and terminated the civil wars : on this account the month was dedicated to his honour, and is still called after his name.

SEPTEMBER, from *septimus*, the seventh month, reckoning from March, which was the first month of the ancients. The Roman senate would have given this month the name of *Tiberius*, but the emperor opposed it. Under other emperors it had other names ; but at present they are all disused.

OCTOBER, the eighth month in the year in Romulus' calendar, though the tenth in that of Numa, Julius Cæsar, &c. October has still retained its name notwithstanding all the names the senate and Roman emperors would have given it; as, *Faustinus*, *Inqictus*, and *Domitianus*.

NOVEMBER was the ninth month in the year of Romulus (whence its name;) but it is the eleventh month of the Julian year.

DECEMBER, from *decem*, ten; it being assigned by Romulus as the tenth month in the year. It is now the last, wherein the sun enters the tropic of capricorn, and makes the winter solstice.

Months are solar or lunar.—A solar month is the space of time within which the sun moves through one entire sign of the ecliptic. A lunar periodical month is the space of time in which the moon makes her round through the zodiac, or wherein she returns to the same point.

The Old Style is the Julian manner of computing time, and agrees with the Julian year, which contains 365 days, six hours. The Gregorian, or New Style, agrees with the true solar year, which contains only 365 days, five hours, and nearly forty-nine minutes. In the year of Christ 200 there was no difference of styles, but there is now a difference of eleven days between the old style and the new, the latter being much beforehand with the former.

At the diet of Ratisbon, in 1700, it was decreed by the body of protestants of the empire, that eleven days should be retrenched from the old style, in order to accommodate it to the new, and the same regulation has since passed into Sweden, Denmark, and England; where it was established by 24 Geo. II. c. 23, which enacts, that the supputation, according to which the year of our Lord begins on the twenty-fifth day of March, shall not be used before and after the last day of December, 1751. And that from thenceforth the first of January every year shall be reckoned the first day of the year, and that the natural day next immediately following the second day of September, 1752, shall be called and reckoned the fourteenth day of September, omitting the eleven intermediate days of the common calendar; and that the several natural days succeeding the fourteenth day, shall be called and reckoned in numerical order. The adoption of the Gregorian computation accordingly took place in 1752, and is now recognized throughout the kingdom.

CHRONOLOGICAL TABLE,

FROM THE INVASION OF ENGLAND BY JULIUS CÆSAR.

Years before Christ.

52 Invasion of England by Julius Cæsar.

The Britons, its inhabitants, were a branch of the ancient Gauls, or Celtæ; of which the Belgæ possessed the western part, the Brigantes had the northern, the Iceni dwelt in Norfolk and Suffolk, and the Silures inhabited South Wales.

50 Dover Castle built by Julius Cæsar.

47 Gloucester built by Arviragus, a Roman general.

45 Cæsar introduced the solar or Julian year.

25 Coin first used in Britain.

Year of our Lord.

43 Claudius Cæsar makes an expedition into Britain.

49 The city of London fortified by the Romans.

61 The Iceni, &c. reduce London to ashes, and massacre 70,000 Romans—Queen Boadicea is defeated by the Romans, and 80,000 Britons slain.

78 Anglesea Isle subdued by the Romans.

85 Julius Agricola, the Roman general, builds a rampart, with a chain of castles from the Forth to the Clyde.

87 The river Medway overflowed the country.

90 Britain first discovered to be an island.

95 The river Humber overflowed, and deluged a country of fifty miles.

110 Luthgacus, the 22nd king of Scotland, a tyrant, put to death by his nobles.

121 Adrian, the Roman emperor, visits Britain, and builds a wall from Newcastle to Carlisle.

154 Hygeus, Bishop of Rome, first takes the title of Pope.

162 The Britons revolt from the Roman government.

178 Lucius, King of Britain, sends to Pope Eleutherus for some Christian preachers.

185 London was the seat of an archbishop.

190 Confirmation first took place.

209 Scotland first received the Christian faith—Severus's wall built from sea to sea.

217 The Septuagint, or Greek Bible, found in a cask.

Year of our Lord.

- 218 The Vulgate edition of the Bible discovered.
- 220 A frost in Britain, which held five months.
- 233 Gold and silver coin used in Scotland.
- 234 A storm in Canterbury, which threw down 200 houses and killed many families.
- 245 The sea swallowed up many thousand acres of land in Lincolnshire.
- 250 The river Thames frozen for nine weeks.
- 272 A famine in Britain, so that persons ate the bark of trees.
- 294 The city of London was walled, and a palace built.
- 298 Mechanical arts in Britain exceeded those of Gaul.
- 306 Constantius died at York, and was succeeded by his son, Constantine the Great—London wall built—a famine in Scotland, when thousands were starved.
- 310 Forty thousand persons perished by famine in England and Wales.
- 316 Surplices first used in churches.
- 325 The Nicene Creed framed.
- 330 An irruption of the sea in Lancashire.
- 340 Saddles were first used—The Creed called the Athanasian now wrote.
- 349 Four hundred and twenty houses blown down in Carlisle, and many persons killed.
- 353 Five thousand persons lost in Cheshire by an irruption of the sea.
- 359 A severe frost in Scotland for fourteen weeks.
- 400 Bishops appointed by the people—The invention of bells.
- 402 The patronage of churches began.
- 410 Constantine, a British prince, was elected the first British king after Lucius.
- 415 Roman highways were made in Britain.
- 416 Colchester destroyed by a storm, and many people killed.
- 432 St. Patrick preached the gospel in Ireland.
- 433 The season of Advent was first observed.
- 476 Hengist's treacherous massacre of 300 English nobles, at an entertainment at Stonehenge.
- 479 Constantine, King of Scotland, slain by a nobleman for ravishing his daughter.
- 508 Prince Arthur begins his reign over the Britons.
- 519 Round Table order of knighthood began.

Year of our Lord.

- 528 Swearing on the Gospels first used.
- 531 University of Cambridge first chartered.
- 534 Morietic, King of Ireland, drowned in a hogshead of wine.
- 547 The Kingdom of Northumberland began.
- 568 Crosses first set upon steeples.
- 582 The Mercian kingdom began.
- 590 The laws of the land translated into Saxon.
- 596 The first Christain burial-place in Britain—Canterbury made the metropolitan archbishopric by St. Augustin.
- 600 Feodal or feudal system introduced by the Saxons.
- 605 The first establishment of the Court of Chancery.
- 610 Laws published in the Saxon tongue—St. Paul's in London built.
- 614 Westminster Abbey built.
- 622 Mahomet, the false prophet, flies from Mecca to Medina.
- 628 The first stone church built at Lincoln—York Cathedral built.
- 640 Parishes in England first laid out, being 45,000, afterwards reduced to 8700.
- 653 London first made a bishopric.
- 670 Building with stone brought into England by Bennet, a monk.
- 674 Glass brought into England by Benedict, a monk.
- 677 Rochester burnt by Ethelred, King of Mercia.
- 695 The Thames frozen for six weeks, so as to build booths upon it.
- 701 A storm at Lincoln, which threw down above 100 houses.
- 709 Silver plate first used by Welford, Bishop of Northumberland.
- 728 Ina, King of Wessex, regulated ale and alehouses.
- 739 A famine all over England, Wales and Scotland.
- 740 Churchyards first admitted into cities.
- 742 Six hundred cities destroyed by earthquakes.
- 746 The Creed, Lord's Prayer, &c. translated into Saxon—Scriptures ordered to be read in British monasteries.
- 747 A dreadful pestilence over Europe and Asia.
- 751 Organs first brought to Europe, and used in churches.
- 758 Burials first allowed in churchyards.
- 762 A plague in England.

Year of our Lord.

- 771 Plague at Chichester, of which 34,000 persons died.
- 786 Pleading introduced into English courts of judicature.
- 788 Plague in the city of Canterbury.
- 789 The custom of pledging in drinking began.
- 790 Trumpets first sounded before English kings.
- 792 A famine in Wales and Scotland.
- 795 The Danes first visited the coasts of Scotland and Ireland.
- 800 The Norman invasions now commenced.
- 807 The Danes first landed in Ireland, and destroyed Roscommon.
- 809 Order of St. Andrew in Scotland instituted.
- 820 Title of King of England first used.
- 827 Egbert, by an edict, orders all the south part of the island to be called England.
- 836 The Flemings trade to Scotland for fish.
- 839 Orkney Isles sold by Denmark to Scotland.
- 851 The Danes landed at the mouth of the Thames, and took Canterbury and London—And Dublin in Ireland.
- 880 Alfred recovers England from the Danes.
- 882 Aldermen first appointed.
- 885 Alfred repairs the city of London.
- 896 Alfred divides England into counties and hundreds, appoints fairs and markets, and founds Oxford University—The first brick buildings in England.
- 897 Knighthood first used in England.
- 915 Doomsday-book commenced—Cambridge University founded.
- 919 A storm which destroyed above 40 houses in Cambridge.
- 923 The river Thames frozen for 13 weeks
- 925 Coroners became officers of the realm.
- 933 Constantine III. King of Scotland, resigned his crown, and became a monk.
- 942 Ireland overrun by the Danes.
- 944 A storm in London which threw down 1500 houses.
- 946 Theft made punishable with death.
- 947 The Danes are overcome in battle by the Irish.
- 951 Southampton nearly destroyed in a storm by lightning.
- 954 A plague in Scotland, which destroyed 40,000 persons.
- 960 The first tunable set of bells hung up at Croyland Abbey.
- 964 St. Pauls, London burnt
- 968 Bells first consecrated.

Year of our Lord.

- 970 Division of Wales into North, South, and Powis Land.
- 971 Tribute of wolves' heads paid to England by the Welsh.
- 979 Juries first instituted, and customs first collected.
- 980 Stone buildings introduced into England.
- 982 Great part of London destroyed by fire.
- 984 England invaded by the Welsh.
- 991 Arithmetic brought into Europe from Arabia.
- 1000 Scarlet dye invented—Paper of cotton rags used.
- 1002 A general massacre of the Danes in England, on Sunday, November 13.
- 1004 Norwich destroyed by Sweyn of Denmark.
- 1005 All the old churches rebuilt—A famine in England.
- 1008 The Danes subdue great part of England.
- 1011 Canterbury Cathedral burnt by the Danes, and nine-tenths of the inhabitants destroyed.
- 1015 Children forbidden by law to be sold in England.
- 1016 London Bridge built of wood.
- 1017 Canute is fully established King of England.
- 1018 Annual amount of the land-tax in England, £82,000. The Danes settled in Scotland.
- 1027 William, Duke of Normandy, born.
- 1032 Scotland divided into baronies.
- 1039 Duncan, King of Scotland, killed by the usurper Macbeth.
- 1041 The first sermon preached at the coronation of Edward the Confessor.
- 1047 A famine in Scotland, which continued for two years.
- 1048 An earthquake at Worcester and Derby.
- 1050 Broad seal of England first used.
- 1051 William, Duke of Normandy, visited King Edward.
- 1052 The court of Hustings granted to the city of London.
- 1055 Nearly 400 houses in London blown down by a storm.
- 1057 Malcolm III. King of Scotland, killed the tyrant and usurper Macbeth.
- 1058 King Edward the Confessor the first who touched for the king's evil.
- 1060 French language and customs first used in England.
- 1063 The river Thames frozen for fourteen weeks.
- 1065 Laws of Edward the Confessor composed—Sealing deeds and charters first used in England—Westminster Abbey rebuilt.
- 1066 The conquest of England, by William, Duke of Normandy, in the battle of Hastings, October 14.

Year of our Lord.

- 1067 The Cinque Ports first appointed—The city of Exeter refused allegiance, but compelled to submit.
- 1068 England divided into baronies—Curfew bell established.
- 1070 Musical notes invented—Feudal law introduced.
- 1072 The bishops made barons—Vice of swearing introduced.
- 1075 First archdeacon in England—Precedency of bishops settled.
- 1076 Justices of peace first appointed in England—Bishops removed from villages to great towns.
- 1077 London much damaged by fire.
- 1078 Tower of London built.
- 1079 Court of Exchequer instituted, and sheriffs appointed first—The Jews arrived in England—The New Forest in Hampshire began to be made.
- 1080 Domesday-book, or a survey of England, began
- 1087 The first English stone bridge at Bow, near Stratford—Gold first coined in England—A famine in England.
- 1088 Robert, Duke of Normandy, conspires against England—The Danes from Dublin burnt Waterford, in Ireland.
- 1090 An earthquake in England, followed by scarcity—The Norman rebellion extinguished—Corporations began in England.
- 1091 A violent storm in England, 500 houses thrown down, and Bow Church in London unroofed—The church steeple and many houses thrown down at old Sarum—And Winchelscomb Church steeple, in Gloucestershire, thrown down.
- 1095 The Welsh rebel, and defeat the Normans and English.
- 1096 The first crusade, or holy war, began.
- 1100 Tower of London walled in—Curfew bell abolished after 32 years—Taxes raised arbitrarily—Coats of arms and heraldry introduced—Goodwin Sands first formed, the sea overflowing 4000 acres—Privilege of making wills granted.
- 1101 Silver coin first made round—The measure of an ell or yard fixed by Henry I.'s arm.
- 1102 Gloucester Abbey and the city of Winchester burnt—Surnames began to be used in England.
- 1107 The first king's speech delivered by Henry I.
- 1109 Land-tax of England three shillings per hide.

Year of our Lord.

- 1110 Cambridge University revived.
 - 1115 St Stephen's Chapel, now the House of Commons, built.
 - 1116 Parliament first met.
 - 1118 Order of Knights Templars established.
 - 1120 Henry I.'s eldest son, and two other children, with 180 nobility, shipwrecked and lost in coming from Normandy.
 - 1123 Woodstock Park the first in England.
 - 1127 Churchwardens and overseers instituted.
 - 1137 Danegelt, or land-tax, abolished by Stephen—A fire in London—London Bridge built—York city, its cathedral, and thirty-nine churches burnt.
 - 1138 Appeals to the pope first made from England.
 - 1140 An eclipse, March 21, which brought on total darkness—Canon law first introduced into England.
 - 1150 Brittany annexed to the crown of France.
 - 1153 Eleven hundred castles demolished in England.
 - 1159 Scutage, the first tax in England levied to pay an army.
 - 1160 Bills of exchange first mentioned—Thirty German heretics in England famished to death.
 - 1163 London Bridge rebuilt with timber.
 - 1164 Herring fishery first practised.
 - 1171 Four knights massacre Thomas a Becket—Preston guild established.
 - 1174 Henry II. arrived from Normandy, and did penance at Becket's tomb.
 - 1176 England divided into circuits, and itinerant judges appointed.
 - 1179 York city again burnt by the Danes.
 - 1180 Glass windows used in private houses in England.
 - 1184 Justices in eyre, or the forests, appointed.
 - 1185 The Knights Templars founded the Temple, London.
 - 1186 The great conjunction of the sun and moon, and all the planets, in the sign Libra.
 - 1187 St. Paul's Church built on stone arches, hitherto unknown.
 - 1189 Henry II. died with grief at the altar, cursing his sons, —Jews massacred at the coronation of Richard I. —500 perished at York—Sheriffs in London first appointed.
- Coarse woollen cloth introduced into England —An eclipse when the stars appeared at ten in the morning, June 22.

Year of our Lord.

- 1192 Houses in London ordered (to prevent fire) to be of stone and covered with slates.
- 1193 Richard I. ransomed for 150,000 marks, or £100,000. of our money—A great dearth in England and France, followed by a pestilence which held three years.
- 1194 *Dieu et mon Droit*, first used on King Richard's victory over the French.
- 1199 Interest first mentioned as legal, at ten per cent.
- 1200 Chimneys first introduced into buildings—Surnames now became common in England.
- 1201 Cities first incorporated.
- 1202 Assize of bread first appointed.
- 1203 The first regular parliament was held.
- 1205 Barons first summoned to parliament—A hail storm as large as hens' eggs which destroyed the corn, demolished many houses, and many persons perished.
- 1208 Bishops banished from England by King John.
- 1209 London Bridge (of stone) finished after 33 years.
- 1210 Bans for marriage ordered to be made public.
- 1212 Fire on London Bridge destroyed 2000 persons.
- 1215 Magna Charta signed by King John and the Barons, at Runnymede, June 15—Court of Common Pleas established.
- 1216 Wheat sold at 12*d.* per quarter, beans and oats at 4*d.*
- 1220 Salisbury Cathedral built.
- 1226 Marriages first celebrated in churches.
- 1227 A conspiracy against Henry for cancelling Magna Charta.
- 1233 Thunder fifteen days, with violent tempests of rain—Houses of London and other cities still thatched with straw.
- 1234 Straw used for the king's bed—Coals discovered near Newcastle—Cider, called wine, made in England.
- 1235 Thames flowed so high, that the lawyers were brought out of Westminster Hall in boats.
- 1236 Leaden pipes for conveying water invented.
- 1237 Water began to be conveyed to London in leaden pipes.
- 1241 The first punishment of hanging, drawing, and quartering—Tin only known in Devon and Cornwall.
- 1242 King Henry III. pledged his crown and jewels on his daughter's marriage—Aldermen of London first appointed.

Year of our Lord.

- 1244 The Chancellor's Court established at Oxford
- 1245 Savoy Palace, Strand, London, built.
- 1246 Tiles first used in England—Houses in London still thatched with straw—Cheapside then lay out of the city.
- 1242 Roger Bacon invented the magic lantern.
- 1253 Linen first made in England—Bible divided into chapters.
- 1255 Eighteen Jews hanged, and about 200 heavily fined for malpractices at Lincoln—Tapestry introduced by Sir F. Crane.
- 1257 Standard weights and measures fixed—Gold first coined.
- 1258 Counties first authorized to send members to parliament.
- 1260 Roger Bacon invented magnifying glasses.
- 1262 Seven hundred Jews slain in London, for demanding more than 2*d.* per week interest on 20*s.*—Thirteen rioters hanged of the goldsmiths' and tailors' companies.
- 1264 The Commons of England first summoned to parliament.
- 1266 Cities and boroughs first represented in parliament.
- 1269 Jews forbidden from enjoying freeholds by act of parliament—The Hamburg Company incorporated in England.
- 1271 The Cathedral and Monastery of Norwich burnt, and the rioters executed in the king's presence.
- 1272 The first treaty with foreign nations.
- 1273 The first coronation feast in England—Gilding with leaf gold invented.
- 1274 Jew money-lenders obliged to wear a plate on their breast—Customs on exports and imports first granted by parliament.
- 1276 Statue of bigamy passed.
- 1277 Two hundred and sixty-seven Jews hanged and quartered for clipping the coin.
- 1280 More than 300 houses destroyed by the sea at Winchelsea—Charter to Newcastle for digging and using coals.
- 1281 Margaret, daughter of the King of Scotland, married to the King of Norway.
- 1282 Fifty Jews suffered at Northampton for malpractices and their synagogues were destroyed.

Year of our Lord.

- 1284 Edward I.'s queen brought to bed at Carnarvon of a son, the first Prince of Wales.
- 1285 Water brought to London, and Cheapside Conduit erected—Fencing schools prohibited in London, as productive of duels—Westminster Abbey rebuilt.
- 1286 Title of Prince of Wales first conferred.
- 1287 All the Jews in England seized in one day—15,000 banished, and their property confiscated.
- 1290 Candles of tallow first began to be used.
- 1291 Barristers first appointed.
- 1293 Regular parliaments commenced.
- 1294 Silver mines discovered in Devonshire.
- 1296 Edinburgh taken.
- 1297 Statue relating to taxes and money bills—The first admiral in England.
- 1298 The present Turkish empire began.
- 1299 Windmills invented.
- 1300 Standard for gold and silver fixed by law—Chimneys only in kitchens or large halls—Legal interest twenty per cent.
- 1302 The mariner's compass invented.
- 1305 Coals imported in a quantity from Newcastle to London.
- 1307 Interest of money forty-five per cent.
- 1309 A public weighing engine set up in London.
- 1310 Lincoln's Inn Society established as an inn of court, heretofore the Bishop of Chichester's palace.
- 1311 The Knights Templars abolished.
- 1318 The greatest earthquake known in England—A famine.
- 1322 Battle of Boroughbridge, Yorkshire.
- 1327 Pardons at coronations first granted in England.
- 1330 Seventy families of woollen manufacturers invited into England from the Netherlands.
- 1331 Two Brabant weavers settled at York—The first woollen cloth made in England.
- 1337 Title of Duke first given in England, to Richard, son of Edward the Black Prince.
- 1339 Sea fight with the French, 400 sail taken, and 30,000 men—Parliament granted 30,000 sacks of wool to the king—Speaker of the House of Commons first chosen—Blankets first made in England—Herald's College instituted—King of England assumed the

Year of our Lord.

- title of King of France—Edward III. invaded France, and pawned his crown and jewels for 50,000 florins—Order of the Garter instituted.
- 1340 Gunpowder and guns first invented by Swarts, a monk.
- 1342 Edward III. made the distinction of Lords and Commons.
- 1344 Titles first granted by patent—Statute of premunire passed, to exclude foreigners from ecclesiastical livings—Knighthood of the Round Table revived—Edward the Black Prince created Prince of Wales.
- 1345 The second time of coining gold in England—First mention of apothecaries in history—Esquire first used by persons of fortune not attending knights.
- 1346 Battle of Cressy, where great guns were first used.
- 1347 Dearth and famine in England—Plague, of which 50,000 died in London, 15,000 in Leicester, &c.
- 1348 Rain, without one dry day or night, from Midsummer to Christmas.
- 1350 Toll-gates or turnpikes first in England—Brewers, dyers, &c. began to use sea-coal for fire.
- 1352 The Turks first enter Europe.
- 1353 The Straud in London first built on—A famine and dearth in England and France, called the dear summer.
- 1355 Pressing seamen first began.
- 1357 Court of Admiralty erected—Herring statute passed.
- 1358 Edward III. quartered the arms of France with those of England.
- 1359 Storm of lightning, &c. which killed vast numbers of horses, and 1000 troops of King Edward III. near Chattles.
- 1362 Pleadings in English changed from French—A very dreadful plague in London.
- 1364 Lord Mayor of London entertains four kings at his table, England, France, Scotland, and Cyprus—John, King of France, died a prisoner in England.
- 1368 Three clockmakers came from Delft first into England, and set up a striking clock in Westminster.
- 1370 Order of Golden Shield and Thistle began—Robert Stuart, the hundredth king of Scotland, and first of the name of Stuart, crowned at Scoon.
- 1377 Plymouth, Portsmouth, Hastings, and Rye, burnt,

Year of our Lord.

and the Isle of Wight taken by the French—Coronation oath now first introduced—Population of England was 2,092,978 souls.

- 1378 Plays first performed in England.
- 1379 A plague in England.
- 1381 Bills of exchange the only legal mode of sending money from England.
- 1386 Linen shirts began to be worn—Linen weavers from the Netherlands established in London.
- 1387 The first High Admiral in England.
- 1388 Duke of Gloucester, and other lords rebel—English barons first created—The Lord Chief Justice of England executed for favouring despotism—Bishops deprived of being judges in capital offences.
- 1389 A sea fight, wherein 80 French ships were taken by the English—Wine sold at 20s. a tun, the second sort at 13s. 4d.—A famine in England—A remarkable storm on the queen's landing.
- 1390 Herring pickling first invented.
- 1391 Brest given up by the English—Cards invented in France for the king's amusement.
- 1393 Scotch gold and silver prohibited in England.
- 1399 King Richard II. taken prisoner by Henry, Duke of Lancaster, who caused him to be assassinated in Pontefract Castle—Henry crowned king of England, as Henry IV. and the order of the Bath instituted—Roger, Earl of Marshe, and Viceroy of Ireland, slain—Copper money used only in Scotland and Ireland.
- 1400 Duke of Exeter's conspiracy against King Henry discovered—Rebellion of the English and Welsh, and war with Scotland.
- 1401 Welshmen forbid purchasing lands in England.
- 1402 Battle of Nesbit, when 10,000 Scots were slain—Decimal arithmetic invented.
- 1403 Isle of Man first governed by the Earl of Northumberland.
- 1405 Thirty-one French ships taken or destroyed near Milford Haven—A bishop first put to death by the civil power.
- 1406 Earl of Northumberland attainted, and the Isle of Man government given to Sir John Stanley.
- 1407 Thirty-thousand persons died of the plague in London.

Year of our Lord.

- 1410 Guildhall in London built.
- 1412 Judge Gascoigne committed the Prince of Wales to prison for assaulting him on the bench.
- 1414 Henry V. claimed the crown of France.
- 1416 Henry V. pledged the regalia for £20,000. to push his conquests—Emperor Sigismond installed in England a Knight of the Garter—England invaded by the French.
- 1417 Paper made of linen rags now used—Henry V. invaded Normandy with 26,000 men.
- 1418 Gunpowder first made in England.
- 1420 Peace made with France—Garter king at arms first appointed in England.
- 1422 First commission of array to raise a militia—Duke of Bedford began his protectorate—King Henry died of a pleurisy at Vincennes.
- 1423 Irishmen all ordered out of England.
- 1424 Freemasons forbidden in England.
- 1426 Scotland receives the Orkney and Shetland Isles from Denmark.
- 1426 Parliament receives petitions against the use of hops.
- 1429 Battles of Herrings and Patay, under Joan of Arc.
- 1430 A national debt was first contracted—Foreigners allowed to have one-half foreigners on juries, but not allowed to hold church benefices.
- 1435 Duke of Bedford's protectorate ended with his death.
- 1438 A staircase fell at Bedford assizes, when 18 persons were killed—Dearth and famine in England, bread made in several places of fern roots and ivy berries.
- 1439 The first Viscount in England.
- 1443 St Paul's steeple, London, fired, and that of Waltham Cross consumed by lightning.
- 1446 The sea breaks in at Dort, and drowns 100,000 persons, April 17.
- 1449 French fleet defeated and taken off Sandwich.
- 1452 The Lord Mayor's show, London, instituted—Guienne, or Gascony, totally lost to England—Constantinople taken by the Turks, May 29.
- 1460 Woodcuts, and engraving on copper invented.
- 1462 The first book printed, which was the Vulgate Bible, 2 vols.
- 1463 Henry VI. taken prisoner in Lancashire.
- 1463 Dress restrained by law.

Year of our Lord.

- 1467 First idea of electricity given by two globes of brimstone—Long toed shoes forbidden under heavy penalties.
- 1471 William Caxton, a mercer, introduced printing—Great Mortality at Oxford—Chester nearly destroyed by fire.
- 1477 Violins invented—Aberdeen University founded—A plague, which destroyed more than 15 years' war.
- 1478 Duke of Clarence drowned in a butt of malunsey.
- 1481 Sweating sickness first observed in England, which carried off great numbers.
- 1483 Population of England was now 4,688,000—Post horses and stages established—Statutes first printed.
- 1486 Sheriff fined £50. for kneeling too near the Lord Mayor at St. Paul's.
- 1487 Artichokes first planted in England—The first poet laureat.
- 1489 Columbus brought maps and sea charts to England.
- 1491 Greek language first introduced into England—Wheat 20*d.* per bushel.
- 1492 Columbus first discovers America.
- 1493 Columbus discovers Montserrat in the West Indies.
- 1494 Algebra first known in Europe—Printing carried on in Westminster Abbey till now.
- 1495 Feodal or feudal laws restored by Henry VII. and limited.
- 1496 Beggars relieved by law—Game act passed.
- 1497 The Portuguese first sail to the East Indies, under Vasques di Gama.
- 1498 South America discovered by Vesputius Americanus—North America discovered by Sebastian Cabot and his son—John Cabot settled Newfoundland, the first English colony in America.
- 1499 Thirty thousand persons died of the plague in London.
- 1500 Virtues of Jesuits' bark discovered.
- 1501 Lord Mayor's feast instituted—Merchant tailors, first so named.
- 1502 Henry VII.'s son died—His chapel at Westminster built—St. Helena discovered.
- 1503 Slave trade first commenced.
- 1505 Shillings first coined in England—Distaff spinning first in England.
- 1509 Henry VII. built the first double-decked ship in England, of 1000 tons.

Year of our Lord.

- 1510 Hats first made in London.
- 1512 War with France—First Royal Navy of England.
- 1513 Benefit of clergy taken from murderers.
- 1517 Luther began the Reformation.
- 1518 Physicians' College incorporated.
- 1520 First geographical map of England—Henry VIII. had the title of Defender of the Faith, for his writings in favour of popery.
- 1522 New survey of England made, the first since dooms-day-book—Roses first planted in England.
- 1524 Beer first introduced into England—Soap first made at Bristol.
- 1529 Secretaries of State first appointed—Lord Cromwell made so.—The name of protestants begins from the diet of Spires.
- 1530 Sir Thomas More, the first Chancellor qualified by education—St. James's palace built.
- 1533 Henry VIII. divorced Queen Catharine, and married Anne Boleyn.
- 1534 Arable lands restrained, and pasture enforced—Silk first worn by the English clergy.
- 1535 Ten thousand friars and nuns turned out of English monasteries—Brass great guns first made in England—Henry VIII. excommunicated by the pope.
- 1536 Translations of the Bible, by order of the king—Six articles of religion published—Wales united to England by parliament—Queen Catharine died, and Queen Anne was put to death, when King Henry VIII. married Lady Jane Seymour.
- 1537 Queen Lady Jane Seymour died in childbed.
- 1538 Variations of the seaman's compass observed—Registers parochial instituted by Lord Cromwell.
- 1539 Pipes of lead invented for conveying water—Cannon began to be used in ships.
- 1540 Dissolved abbeys, &c. valued at £2,853,000.—Order of the Thistle instituted.
- 1543 Pins brought from France—Mortars for bombs used in England—Bankrupts regulated by law.
- 1544 Iron first cast in Sussex—Edinburgh burnt—Good land let in England at 1s. per acre.
- 1545 Needles first made in England by a native of India, which art died with him—Port-holes in ships of war introduced.
- 1546 Publia stews suppressed.

Year of our Lord.

- 1547 Statute relating to slaves and servants—Iron great guns made—Henry VIII. died, and the Duke of Somerset protector for the young king.
- 1551 The first comedy acted in England.
- 1552 Treason requiring two witnesses—Grapes first brought into England, and planted in Sussex—Starching linen first introduced—Forty-two articles of religion published—Translation of David's Psalms by Sternhold and Hopkins.
- 1553 Mary, of bloody memory, crowned queen, October 1.
- 1554 Twenty marks a sufficient support for gentlemen of the law—Wheat sold at 6s. 8d. per quarter—Seven bishops deprived for being married.
- 1555 First law to repair highways—Inclosures restrained.
- 1556 Slave trade began with England—Cranmer, Archbishop of Canterbury, and about 300 protestants, burnt, and great numbers perished in prison.
- 1557 Glass bottles first made in England—Alteration in the Order of the Garter.
- 1558 Calais taken from the English—Queen Mary died of a dropsy, and Queen Elizabeth succeeded, who completed the Reformation.
- 1559 Rebellion of the Roman Catholics against Elizabeth.
- 1560 Queen Elizabeth first wore silk stockings—Westminster Abbey first made collegiate—Temple societies founded.
- 1561 Lapis calaminaris and copper mines discovered in England.
- 1563 Knives first made in England—Iron wire till now imported.
- 1564 Knit worsted stockings first made in England.
- 1565 Study of botany revived—Royal mines established—
• A great sum paid for corn imported in a dearth.
- 1567 First physic garden in England, by Gerard—Gilliflowers, carnations, &c. first planted here by the Flemings—Flemish weavers, dyers, &c. in England.
- 1568 Husbandman's labour 4d. per day—Italian book-keeping first used in London.
- 1570 War with Scotland—Gauging invented.
- 1571 Law for wearing woollen caps—Harrowgate mineral spring discovered.
- 1572 Fans, muffs, masks, and false hair, devised by Italian harlots, first brought from France—The great massacre of protestants at Paris.

Year of our Lord.

- 1573 Turkeys first came into England.
- 1577 Sir Francis Drake set sail round the world—Sheriffs and 300 persons died at Oxford assizes of an infection.
- 1578 Tulip roots first brought into England from Vienna—Whales killed at Newfoundland for the oil only, the use of the bone unknown.
- 1579 The Republic of Holland begins by the union of Utrecht—Linen staining first known in England.
- 1580 Sir Francis Drake returns from his voyage round the world—Coaches first used in England.
- 1583 Wood first cultivated in England—The tide ebbed and flowed three times in one hour, at Lyme, in Dorsetshire—Thames water first conveyed into London, by the London Bridge waterworks—Tobacco first brought into England.
- 1584 Carthagen taken by Sir Francis Drake—Cape Breton and Virginia discovered by the English.
- 1585 Cavendish's first voyage round the world.
- 1587 Duelling introduced into England—Mary, Queen of Scots, beheaded at Fotheringay Castle, after eighteen years' imprisonment.
- 1588 Sir Francis Drake defeats the Spanish Armada in the English Channel—Fire-ships invented—Paper first made in England, at Dartford, in Kent—Shipping of England 31,385 tons, and 15,272 mariners—Henry IV. of France passes the edict of Nantes, tolerating the protestants.
- 1589 Earl of Cumberland's expedition against Spain—Stocking weaving invented by the Rev. Mr. Lee, of Cambridge.
- 1590 Criminals first transported—Letters in algebra first used—Customs farmed for the last 20 years at £20,000. a year.
- 1591 East Indies visited overland by some English—First patent for printing—Three ships went from England to the East Indies.
- 1592 Falkland Islands discovered—Customs amounted this year to £50,000.
- 1593 Statute mile first fixed in England.
- 1594 Broken Wharf engine erected to convey water—Plague in London carried off one-fourth of its inhabitants.

Year of our Lord

- 1595 Sir John Hawkins's expedition against Spanish America—Jamaica plundered—Carribbee Isles and St. Christopher's discovered—Shakespeare flourished about this time.
- 1596 Earthquake in Kent, where the hills became valleys full of water.
- 1597 Battle of Blackwater, Ireland—The first act for relieving the poor—Watches first brought into England from Germany.
- 1599 Sailcloth made in England.
- 1600 Earl of Arundel introduced brick buildings—East India Company's first charter.
- 1601 Insurance of shipping, &c. secured by law—Witchcraft act passed—Men ordered by law not to ride in coaches.
- 1603 County courts in London revived—Cauliflowers first planted in England—Royal licence to Shakespeare for a theatre—Queen Elizabeth died.
- 1604 Union of England and Scotland attempted—James I. first styled King of Great Britain.
- 1605 Gunpowder plot discovered—Attraction first discovered by Kepler—Order of St. Andrew renewed in England.
- 1606 Oaths of allegiance first administered—Ambassadors first sent from Turkey to England
- 1607 Insurrection of the Puritans---Increase of buildings within a mile of London forbidden---English first settled in Virginia.
- 1608 Asparagus first produced in England.
- 1609 The Dutch paid a tribute for fishing on our coasts—Alum first brought to perfection in England—First legal copper coins introduced, and leaden tokens abolished.
- 1610 Sir Francis Drake brought potatoes first from America to Ireland.
- 1614 New River brought to London.
- 1616 Judge Bennet fined for bribery in £20,000.---Cape Horn first sailed round.
- 1617 Sports allowed on Sundays after service.
- 1618 Steam-engine invented for raising water or ballast.
- 1619 Harvey, an Englishman, confirms the circulation of the blood.
- 1620 Broad silk manufactory brought into England---Coining with a die used in England.

Year of our Lord.

- 1621 The Puritans settle in New England—Public-houses first licensed.
- 1622 Nova Scotia settled by the Scotch.
- 1625 King James died of an ague, and Charles I. succeeded.
- 1636 Barometers invented.
- 1627 Duty laid on coals—War with France.
- 1628 Canada taken by the English—Riot in London, and Dr. Lamb killed by the mob—New Holland discovered by the Dutch.
- 1630 Boston in New England built—Epsom mineral spring discovered.
- 1631 St. Paul's, London, burnt, and rebuilt.
- 1632 Antigua and Montserrat planted by the English—A great fire on London Bridge.
- 1633 Saw mills first erected near London—Seldon maintained England's sovereignty over the British seas, —Covent Garden Square built.
- 1634 Ship money exacted—Bombs and mortars invented. Sedan chairs a patent invention—Saturn's ring discovered.
- 1635 Jamaica pillaged by the English—Thomas Parr, aged 152, died in London from change of air and diet—Regular posts established from London to Scotland, Ireland, &c.
- 1636 Ballast of the river Thames monopolized by the king—Patent for English brass and copper coin—First public lecture in Arabic at Oxford.
- 1637 Liturgy first read in Scotland.
- 1640 King Charles seized the merchants' money at the mint—Bank of England began—King Charles disoblges the Scots, and their army takes Newcastle—Forty thousand English protestants massacred in Ireland.
- 1642 Habeas Corpus and the Bill of Rights act passed—Ship money and Star Chamber abolished—Coffee first used in England at Baliol College, Oxford—King Charles impeaches five refractory members, which begins the civil war, on which he retires to York.
- 1644 A terrible fire at Oxford—Navy Office founded—Post Office yielded £3000. per annum.
- 1645 Goldsmiths became the first bankers.
- 1646 King Charles put himself into the hands of the Scots, at Newark, who sold him for £200,000.

Year of our Lord.

- 1647 King Charles seized by Colonel Joyce, at Holmby.
- 1648 King Charles escaped from Hampton Court to the Isle of Wight—Taken and confined in Car sbrook Castle—Removed to Windsor.
- 1649 King Charles tried, condemned, and beheaded, Jan. 30, aged 49—Oliver Cromwell goes to Ireland with his army—Battle of Rathmines, in Ireland.
- 1650 Battle of Dunbar, in Scotland—Jesuit's bark first brought to Europe—Bread first made with yeast in England—First English coffee-house at Oxford—Oliver Cromwell returned from Ireland.
- 1651 Irish rebellion ended—War with the Dutch—English settled at St. Helena—Triennial parliaments began—Hailstones of seven inches round fell at Dorchester—Cromwell totally defeated the king's forces at Worcester, Sept. 3.
- 1652 Four sea engagements with the Dutch in the Downs.
- 1653 Oliver Cromwell becomes Protector—Lord Mayor and sheriffs arrested at the suit of two pretended sheriffs.
- 1654 Air-pumps invented—Post-Office yielded £10,000.
- 1656 The English destroy the Spanish galleons at Cadiz—Air-guns invented—Oliver Cromwell re-admitted the Jews into England.
- 1657 Oliver Cromwell refused the title of King—Blake destroyed a Spanish fleet of galleons at the Canaries.
- 1658 The English take Dunkirk from Spain, and deliver it to France—Oliver Cromwell dies, September 3, and a terrible storm all over Europe is felt the same day—Richard Cromwell succeeds as Protector.
- 1659 Richard Cromwell's protectorate ended.
- 1660 The restoration of Charles II. May 29th—Royal Society of London instituted—General Post-Office established—Nine bishops restored, and eight consecrated.
- 1661 Queen of Bohemia visited England—Portuguese gave Bombay to the English—Conventicles punished by law—Wine licences established.
- 1662 Hearth or chimney money, 2s. per annum, levied—Feudal laws abolished by statute—Act of uniformity passed—Milling coin introduced.

Year of our Lord.

1663 Cattle prohibited importation from Ireland and Scotland---Corn, and coin in bullion, permitted to be exported---Fire-engines invented---Royal Society, London, incorporated---Vicuallling Office instituted.

1665 Eighteen capital Dutch ships taken and destroyed off Harwich Earl Sandwich took twelve men of war, and two East India ships--First gazette published at Oxford---Sixty-eight thousand persons died of the plague in London.

1666 Sea-fight, in which the English lost nine, and the Dutch fifteen ships---Dutch totally defeated, losing twenty-four men of war, four admirals, and 4000 officers and seamen---War with Denmark and France---First act for burying in woollen---Gazette first published in London---Tea introduced from Holland---The great fire of London, which destroyed 400 streets, and 13,000 houses, September 2---5.

1667 Dutch destroy the English fleet at Chatham.

1669 Coventry act passed---New theatre at Oxford built.

1670 Henry Jenkins died, aged 169---Shoe buckles first worn in England---Union of England and Scotland attempted the second time---Royal Exchange built.

1672 War with the Dutch---Five Dutch Smyrna fleet, and four East India ships, taken by the English---Duke of York defeats the Dutch by sea---English take Tobago---Halfpence and farthings first coined by government.

1673 Dutch thrice defeated at sea Prince Rupert---Test act passed---Guineas first coined, so called from the gold being brought from the Guinea coast.

1674 Peace with the Dutch---when they surrendered the honour of the flag to England---Plate-glass first made at Lambeth.

1675 First stone of St. Paul's cathedral laid.

1677 Votes of the House of Commons first printed---Monument, London, finished.

1679 Unaccountable darkness at noon-day in England---Second Habeas Corpus act passed---War with France, followed by a general peace.

1781 William Penn settles in Pennsylvania.

Year of our Lord.

- 1682 Eight Bantam ambassadors in England—Hydraulic fire-engines invented.
- 1683 Rye-house plot prevented by a fire at Newmarket—Penny post set up.
- 1687 Charity schools in London instituted.
- 1688 William, Prince of Orange, landed in England with an army, when King James II. fled from his palace.
- 1689 Coronation oath enacted—Toleration act passed.
- 1690 King William landed in Ireland—James is defeated, and the Duke of Schomberg killed, at the battle of the Boyne—Isles of St. Christopher and Eustatia retaken from the French---The English and Dutch fleets defeated off Beachy Head.
- 1691 Conspiracy of the Bishop of Ely and others, to restore King James—Eleven thousand persons died in a great mortality at York.
- 1692 Conspiracy of Granvil, &c. to assassinate King William.
- 1693 Bayonets first invented in England—Bank of England established—First public lottery this year.
- 1694 Stamp duties first began—Bill for triennial parliaments passed.
- 1695 Bachelors and widows taxed—Also births, burials, and marriages.
- 1696 Window-tax established—Edystone light-house first built.
- 1698 Whitehall totally consumed by a fire.
- 1699 Billingsgate made a free fish market.
- 1701 Prussia erected into a kingdom—Abjuration oath first required—Hanover succession established by law ---Society for the propagation of the gospel incorporated.
- 1702 Quaker's affirmation first accepted as an oath.
- 1704 Gibraltar taken by Sir George Rooke---Court of Exchequer instituted.
- 1705 Bills of exchange and promissory notes regulated.
- 1706 Union between England and Scotland---Battle of Ramillies.
- 1709 Riots in London on Dr.Sacheverel's trial---Statute in favour of literary property.
- 1711 Fifty new churches ordered to be built by parliament ---Government take the penny post---Clarendon Printing-house, Oxford, founded.

Year of our Lord.

- 1713 Newspapers stamped---Peace of Utrecht.
- 1714 Interest of money confirmed at five per cent.---Queen Anne died of an apoplexy---George I. Elector of Hanover succeeded.
- 1715 Total eclipse of the sun, that birds went to roost.
- 1716 River Thames dry above and below London Bridge, September 14---Triennial act repealed, and septennial act passed---Great frost, and a fair on the Thames.
- 1717 Guineas reduced to 21s.
- 1722 Conspiracy of Counsellor Layer and others---Thread first made at Paisley, in Scotland---The great Duke of Marlborough died, June 22.
- 1725 Earl of Macclesfield fined £30,000, and committed to the Tower.
- 1726 Ward, of Hackney, expelled the House of Commons for forgery.
- 1727 Gibraltar besieged by the Spaniards---King George I. died, and King George II. succeeded---Inoculation first tried on criminals with success.
- 1729 Dublin parliament house began, which cost £40,000 ---Frederic, Prince of Wales, arrived in England.
- 1731 Spaniards besiege Gibraltar.
- 1734 Felony to forge or counterfeit bills of exchange---Franking letters commenced.
- 1735 Thames so high that the lawyers came out of Westminster Hall in boats---on the Essex coast several thousand sheep and black cattle drowned.
- 1736 At Edinburgh the mob hanged Captain Porteus.
- 1737 Scarborough cliff sunk, and the spa removed---Radcliffe's Library, Oxford, began building.
- 1738 Bank paid off one million capital---Westminster Bridge began.
- 1740 Solar microscopes invented---Americans first use paper money.
- 1741 Persian trade opened through Russia---Centre arch of Westminster Bridge finished.
- 1743 Paisley manufacture of handkerchiefs began.
- 1744 Victory man of war, of 100 guns, with Admiral Balchen, &c. lost.
- 1745 Rebellion in Scotland---Battles of Fontenoy and Preston Pans, Sept. 21---Marshal Bellisle brought prisoner to Windsor castle---English take Cape Breton, Louisburg, and Nova Scotia.

Year of our Lord.

- 1746 Last arch of Westminster bridge finished---Battle of Falkird, Jan. 17, and Culloden, April 16.
- 1747 Coach tax commenced.
- 1750 Two judges, the Lord Mayor, and many others, died of the jail distemper caught at the Old Bayley---Westminster Bridge opened for passengers.
- 1751 George III. eldest son to Frederick, created Prince of Wales---King's Bench prison built.
- 1752 New style began in England, the 3rd of September being accounted the 14th---Violent rain in Wales, which destroyed 10,000 sheep.
- 1753 Society of Arts and Sciences, London, instituted.
- 1755 Lisbon ruined by an earthquake, Nov. 1.
- 1757 National debt was £74,780,886. 3s. 2d.
- 1758 Temporary bridge at London burnt, but made passable in ten days---London Bridge repaired, for which government gave £15,000.
- 1759 Judges appointed for life---Bank of England issued small notes---North America wholly conquered by the English.
- 1760 Portsmouth Dockyard burnt by accident, damage £400,000---Shipping of England was 300,416 tons, and 70,000 men---George II. died, and George III. succeeded.
- 1761 Tide ebbed and flowed four times in the hour at Whitby---Buckingham Palace purchased for the queen.
- 1762 Three Cherokee chiefs arrived in England---Thirteen whales driven ashore on the English coast.
- 1763 A great frost was ninety-four days---America confirmed to England.
- 1764 Stamp act in America passed---Franking letters restrained---Harrison's time-piece discovers the longitude
- 1765 Isle of Man annexed to the English crown.
- 1769 East India company give £400,000. for five years prolongation of their old charter.
- 1770 Portsmouth Dockyard accidentally burned, damage £100,000.—Adelphi Buildings, Strand, London, built---Black Friars Bridge finished.
- 1771 Solway Moss, near Carlisle, moved for four days.
- 1772 Revolution in Denmark, when the queen was imprisoned, January 17—Augusta. Princess Dowager of

Year of our Lord.

Wales, died, aged 53—Insurrection at Christianstadt, which ended in a revolution in Sweden, rendering the king absolute, and completed at Stockholm—Negroes declared free in this country.

- 1773 Review of the fleet at Portsmouth by his majesty Order of the Jesuits suppressed by the pope---Disturbances in America begin by the destruction of tea on board three ships at Boston, December 18.
- 1774 Louis XV. died, May 10, aged 64---Turkish army ruined by the Russians, June 20---Peace between the Russians and Turks, near Schumla, July 21---The ancient parliament of Paris restored, Nov. 12.
- 1775 Hostilities in America began at Lexington, April 19---Action of Bunker's Hill, June 17.
- 1776 Congress assume independency, May 15, and declare it, July 4---Attack on Charlestown, June 28---General Howe lands on Staten Island, July 3---Battle on Long Island, August 27---New York taken, September 15.
- 1777 Ticonderago taken by General Burgoyne, July 6---General Howe embarks his army off Staten Island, July 24, and lands in Chesapeake Bay, August 30---Philadelphia taken, Sept. 26---Battle of German Town, Oct. 4---General Burgoyne's army surrenders at Saratoga, Oct. 16.
- 1778 Treaty between France and the Americans, Feb. 6---Philadelphia evacuated, June 18---Action in the Jerseys, June 28---Austrians and Prussians begin hostilities, July 7---Action at sea between the English and French fleets, July 27---Pondicherry taken, October 17---French routed at St. Lucia December 28---Voltaire and Linnæus died.
- 1779 St. Vincent's taken by the French, June 17; Grenada, July 3---Ireland allowed a free trade.
- 1780 Engagement with Langara, Jan. 16---Rodney took twenty-two sail of Spanish ships, Jan. 28---Riots in London, July---War against Holland, Dec. 20---Woollen goods first exported from Ireland.
- 1781 St. Eustatia taken, February 3rd; retaken, Nov. 17---Earl Cornwallis surrendered his army, Oct. 19.
- 1782 Minorca taken, Feb. 5---Admiral Rodney beat Count de Grasse, April 12---Independence of America admitted, Nov. 30---Royal George overset at Spithead.

Year of our Lord.

- 1783 Preliminaries of peace, Jan. 20---Armistice between England and Holland, Feb.---Definitive treaty, Sept. 3---Order of St. Patrick in Ireland began---Three earthquakes in Calabria.
- 1784 Peace ratified by America, March 24 ; with Holland, May 24---First bishop consecrated in America.
- 1785 Frost 115 days.
- 1786 Commercial treaty with France, signed October 29---8,000,000 souls in England.
- 1787 Amsterdam taken possession of by Prussia, Oct. 9---Quarrel between the King of France and parliament began.
- 1788 War between the Turks, Germans, and Russians---Treaty between great Britain and Russia, June 13---Stadtholdership guaranteed to the Prince of Orange by the United States of Holland, June 27---Russia declares war against Sweden, June 30---George III. attacked by an alarming disorder, Nov. 6---French notables assembled, Nov. 6---Ocksakow taken, Dec. 17---Life and horse guards disbanded.
- 1789 General illumination in England on the king's recovery, March 10---Insurrection in France, March---States General of France convened, May 5---French king makes concessions, June 26---Revolution in France, July 3---Bastille destroyed, July 20---Insurrection in Brabant, August 10---Bender taken, October 8---Ghent surrendered, November 23 ; and Brussels, December 12.
- 1790 Joseph II. Emperor of Germany, died Feb. 20---The French clergy deprived of their benefices, and have small pensions decreed in lieu of them, February---Parliaments abolished in April---Titles suppressed, June 19---Ceremony of the confederation, July 14---Necker resigns, and retires to Switzerland, Sept. 4
- 1791 Mirabeau dies in March---Louis and his family escape from Paris, but are stopped at Varennes, June 21---Treaty of Plinitz, July---Riots in [Brimingham, July.
- 1792 Leopold II. Emperor of Germany, dies suddenly, March 1---Gustavus III. King of Sweden, shot by Ankerstorm, March 15---French declare war against Germany---Duke of Brunswick publishes his manifesto, July 25---Swiss guards, and all the servants

Year of our Lord.

at the *Thuilleries* murdered, August 10---Royal family of France imprisoned---Princess Lamballe, and 1000 others, massacred in Paris---Royalty abolished, and France declared a republic, Sept. 20---Battle of *Gemappe*, Nov. 7.

1793 Louis XVI. perishes under the guillotine, Jan. 21---The French republic declares war against England, Holland, and Spain, Feb. 2---Marat murdered by Charlotte Cordey, July 14---Toulon submits to Lord Hood, Aug. 23; who is obliged to leave it, Dec. 19---General Custine executed in July; and the Queen of France, by the guillotine, Oct. 16---The heads of the Gironist party executed, Oct. 30---The Duke of Orleans guillotined.

1794 Martinico taken by Sir Charles Grey, March 26---Elizabeth, sister to the late King of France, guillotined, May 12---Lord Howe's victory over the French fleet, June 1---Earthquake and eruption of Mount Vesuvius, June 13 to 24---Robespierre and his party executed by torch light, July 28---Warsaw taken by the Russians after a bloody engagement, Nov. 8.

1795 Revolution in Holland; the stadtholder arrives in England, Jan. 20---Prince of Wales married to the Princess Charlotte of Brunswick, April 8---Peace between Prussia and France, April 10---Warren Hastings acquitted, after a trial of seven years, April 23---Dauphin of France died at Paris, June 9---Peace between France and Spain, July 22---Cape of Good Hope taken from the Dutch, Sept. 23---Stanislaus, King of Poland, made a formal surrender of his crown; his kingdom partitioned between Russia, Austria, and Prussia, Nov. 25---Church of St. Paul, Covent Garden, London, burnt.

1796 General Washington resigned the presidency of America, and was succeeded by Mr. Adams---Spain declared war against great Britain, Oct. 10---Catherine II. Empress of Russia, died, Nov. 17.

1797 Buonaparte defeats the Austrians near Verona, Jan. 14---He defeats the pope's army near Ancona, Feb. 10---A famous victory gained by Admiral Sir John Jervis over the Spanish fleet off Cape St. Vincent, Feb. 14, in consequence of which the admiral was

Year of our Lord.

created Earl St. Vincent---The Princess-Royal of England married to the Prince of Wirtemberg, May 18---Admiral Duncan defeated the Dutch fleet, of which he captured nine ships of the line, Oct. 12, and was created a viscount---A general thanksgiving for the great naval victories of lords Howe, St. Vincent, and Duncan; the king and both houses of parliament going in grand procession to St. Paul's, Dec. 19.

1798 Ireland put under martial law, March 30---Rebellion broke out in the south of Ireland, April 2---The glorious victory of the Nile, achieved by Admiral, afterwards Baron Nelson, in which he took nine ships of the line from the French, burnt two, &c. August 1---Victory of Sir J. B. Warren over the French fleet off Ireland, in which the *Hoche*, of eighty guns, and three frigates, were captured, October 12---The income tax brought forward, Dec. 3---The King of Sardinia forced by the French to sign a renunciation of his throne, 9th---The King and Queen of Naples arrive at Palermo, having fled from Naples on the approach of the French, 28th.

1799 Naples taken by the French, Jan. 24---Suwarrow's successes against the French, April 27, 28, June 19, August 15---Seringapatam taken, Tippoo Saib killed, May 4---Duke D'Angouleme married to the Princess Royal of France at Mittau, June 9th---Buonaparte arrives in France from Egypt, Oct. 16---Changes the government of the republic, and is appointed First Consul, Nov. 10---General Washington died, the 15th.

1800 Buonaparte makes overtures for peace to the British government, which, however, the ministry think proper to reject, Jan. 1 to 17---Great battle of Marengo, June 14---Kleber assassinated in Egypt, *ibid.*---First stone of the wet-dock, at the Isle of Dogs, laid, July, 12---Unsuccessful attempt of the English upon Ferrol, in Spain, Aug. 25---Malta taken by the English, Sept. 5---Conspiracies to kill Buonaparte, Oct 10, and Dec. 24th---Embargo laid by Russia upon British ships, Sept. 10, and Nov. 27---Russia, Sweden, and Denmark, unite against England.

Year of our Lord.

- 1801** Union between Great Britain and Ireland takes place, January 1—Lavater, the physiognomist, died at Bearne, the 3rd—The first parliament of the United Kingdom of Great Britain and Ireland met, the 22nd—Peace signed between the French republic and the Emperor of Germany, at Lunéville, Feb. 9—The English ministry changed, and Mr. Pitt retires, in March—Victory over the French in Egypt, March 21, in which Sir R. Abercomby received a wound, which he survived but a few days—Paul I. Emperor of Russia, died the 23rd, and is succeeded by Alexander—Peace between France and Naples, the 28th—The Danes take possession of Hamburg on the 29th—Sir Hyde Parker and Lord Nelson pass the Sound, and after destroying the fleet at Copenhagen, made a peace with the Danes, April 2—Conquest of Egypt completed by General Hutchinson, July—Lord Nelson's unsuccessful attempts on the flotilla at Boulogne, August 6 and 15—Preliminaries of peace signed by England and France, Oct. 1.
- 1802** Peace finally concluded between England, France, Spain, and Holland, March 27.
- 1803** War declared by Great Britain against France, May 16—St. Lucia taken by the English, June 20, and Tobago on the 30th—Insurrection in Dublin, and murder of Lord Kilwarden, July 23—Hanover taken by the French—French army at Cape François, in St. Domingo, capitulate with the blacks for the evacuation of the island, Nov. 19; and afterwards submit to an English squadron, with their ships of war and merchantmen, the 30th.
- 1804** Buonaparte proclaimed Emperor of the Gauls, May 20, which finishes the republic of France, after it had continued 4136 days, only one day less than the duration of the commonwealth in England, that immediately followed the decapitation of Charles I.—Coronation of Buonaparte by the Pope, at Paris, as Emperor of the Gauls, Dec. 2.
- 1805** Buonaparte assumes the title of King of Italy, May 26—Victory over the combined fleets of France and Spain, off Cape Trafalgar, by the English fleet, under Lord Nelson, who fell in the engagement; the allies losing 19 sail of the line,

Year of our Lord.

and the French admiral and two Spanish admirals taken, Oct. 21—Four French ships (part of the combined fleet escaped from the battle of Trafalgar) taken by Sir R. Strachan, Nov. 3—The French enter Vienna the 14th—Battle of Austerlitz, in which the allied armies of Austria and Russia, commanded by their respective sovereigns, were completely overthrown by the French army under the Emperor Napoleon, Dec. 2—This decisive victory followed by a peace between France and Austria, concluded at Presburg, in Hungary, 27th—Bavaria and Wirtemberg erected into kingdoms by the favour of Buonaparte; and other great changes in Germany.

1806 Funeral of Lord Nelson, and grand procession to St. Paul's, Jan. 9---Cape of Good Hope taken by General Baird and Admiral Sir Home Popham, 10th---Death of Mr. Pitt, the 23rd, in his 47th year---New ministry appointed, in which Mr. Fox and most of his friends are included, Feb.---Louis Buonaparte proclaimed King of Holland, June 11---War formerly declared in London against Prussia, 14th---Buenos Ayres taken from the Spaniards by Sir Home Popham, 28th---The Emperor of Austria, Francis II. made a formal resignation of the high office of Emperor of Germany, Aug. 7---Buenos Ayres retaken by the Spaniards, on the 12th, after an attack of three days---Death of Mr. Fox, Sept. 13---Great battle of Jena, in which the French took from the Prussians 200 pieces of cannon, 30 standards, and 28,000 prisoners, Oct. 14.

1807 Act passed for the abolition of the slave trade---The British parliament dissolved---Insurrection in Turkey; deposition and murder of their Emperor. Selim III. in May---Dantzic surrendered to the French, 26th---Mustapha IV. ascends the throne of Turkey, 29th---The great battle of Friedland between the Russians and French, in which the former were completely overthrown, with the loss of 80 pieces of cannon, and 17,000 men killed, June---The loss of the Russian army in the different actions, at Spanden on the 5th, Deppen on the 6th, Gutstadt on the 8th, Heilsburg on the 10th, and Friedland on the 14th, amounted to 60,000 men,

Year of our Lord.

in killed, wounded, and prisoners, 120 pieces of cannon, and seven standards---The French enter Konisberg, 16th---An armistice concluded between the Russians and French, 22nd---Treaty of Tilsit, July 6---An armistice concluded between the Russians and Turks, Aug. 24---The garrison of Copenhagen capitulate to the British troops, after a severe bombardment of three days, Sept. 6---Portugal shuts her ports against the English, Oct. 20---The Russians declare war against England, 26th---The English government declares France in a state of blockade, Nov. 11---The prince regent and court of Portugal sail from Lisbon for the Brazils, 29th---The French enter Lisbon, *ibid.*---French imperial decrees of Nov. 23, Dec. 17, & 26, 1807, Jan. 11, 1808, &c. restricting the commerce of neutral powers---Jerome Buonaparte issues his proclamation on his accession to the throne of Westphalia, Dec. 17---The English declare war against Russia, 18th---An embargo laid by Congress on all vessels of the United States, Dec. 22.

1808 The Duke of Berg enters Madrid with a French army, April 24---The king and princes of the house of Bourbon cede their rights to the throne of Spain, May 5 to 10---The pope's territories annexed to the kingdom of Italy, 21st---Joseph Buonaparte declared King of Spain, June 6---A French squadron at Cadiz surrenders to the Spaniards, 14th---General Dupont, and 8000 French, surrender to the Spaniards, July---Defeat of the French in Portugal, by Sir A. Wellesly, Aug. 21---Convention of Cintra, by which the French, &c. evacuate Portugal, 30th.

1809 Battle of Corunna, and death of General Moore, Jan. 16---War between Austria and France, April 9---Vienna captured, May 13---Battle of Talavera, July 21---Sir A. Wellesly created a peer with the title of Viscount Wellington---The latter end of July a British expedition of 100,000 land and sea forces, under the Earl of Chatham, sails to the coast of Holland---The American government renews the non-intercourse act, on our refusal to ratify Mr. Erskine's engagements, August 9---Surrender of Flushing, 15th---Lord Chatham arrives in town

Year of our Lord.

- from the Scheldt, without accomplishing the objects of the expedition, Sept. 16—Lord Castlereagh and Mr. Canning, two of the privy-council, fight a duel, 21st—Peace concluded between France and Austria, Oct. 14—His majesty entering on the 50th year of his reign, the day observed as a national jubilee, 25th—The Emperor Buonaparte and the Empress Josephine dissolve their marriage, Dec. 15th.
- 1810 The marriage of the Emperor Buonaparte to the Archduchess Maria Louisa of Austria, celebrated at Paris, April 1—Augustenberg, the Crown Prince of Sweden, died suddenly while reviewing his troops, May 29—Bernadotte, Prince of Ponte Corvo, chosen Crown Prince of Sweden by the Diet, Aug. 21.
- 1811 The Prince of Wales appointed Regent of the United Kingdoms of Great Britain and Ireland, Jan. 27—Battle of Barossa, March 5th—Battle of Albuera, June 16th.
- 1812 Russia declares war against France, April—Badajoz taken by storm, 6th—Battle of Salamanca, July 24—Americans declare war against England—Battle of Borodino, and subsequent destruction of Moscow, Sept.—Disastrous retreat of the French from Moscow, Nov.
- 1813 Prussia and Sweden unite with Russia against France—Armistice concluded between the allies and the French, May 23—Battle of Vittoria, June 23—Austria declares war against France, August 11—Death of General Moreau at the battle of Dresden, 27th—St. Sebastian taken by storm, 31st—Pamplona surrendered to the Spaniards, Oct.—Total defeat of the French army under Buonaparte at Leipsic, Oct. 18—Revolution in Holland, 19th.
- 1814 The combined armies enter France, Feb.—Battle of Laon, in which General Blucher defeats Buonaparte with great loss, March 9—The English enter Bourdeaux, 12th—Battle of Montmaitre, in the neighbourhood of Paris, 30th—Entrance of the allies into Paris, 31st—The provisional government prepare a constitution, and invite Louis XVIII. to the throne of his ancestors, April 6—Buonaparte deposed, and retires to the Isle of Elba—General peace.

LIST OF THE MONARCHS OF ENGLAND.

NORMAN LINE.

	<i>Year of our Lord.</i>
William the Conqueror came to the crown	- - 1066
William II.	- - 1087
Henry I.	- - 1100

HOUSE OF BLOIS.

Stephen	- - - - -	1135
Henry II.	- - - - -	1155
Richard I. surnamed Lion's Heart	- - - - -	1189
John, surnamed Sans Terre	- - - - -	1199
Henry III.	- - - - -	1216
Edward I. surnamed Long Shanks	- - - - -	1274
Edward II.	- - - - -	1307
Edward III.	- - - - -	1327
Richard II.	- - - - -	1377

HOUSE OF LANCASTER.

Henry IV. of Bolingbroke	- - - - -	1399
Henry V. of Monmouth	- - - - -	1413
Henry VI. of Windsor	- - - - -	1422
Edward IV.	- - - - -	1472
Edward V.	- - - - -	1483
Richard III.	- - - - -	1483
Henry VII.	- - - - -	1485
Henry VIII.	- - - - -	1509
Edward VI.	- - - - -	1547
Mary	- - - - -	1553
Elizabeth	- - - - -	1558
James I.	- - - - -	1603
Charles I.	- - - - -	1625
Charles II.	- - - - -	1661
James II.	- - - - -	1685
William III. and Mary II.	- - - - -	1688
Anne	- - - - -	1702
George I.	- - - - -	1714
George II.	- - - - -	1727
George III.	- - - - -	1760

THE
YOUNG MAN'S COMPANION ;
OR,
YOUTH'S INSTRUCTOR.

PART X.
RELIGION.

RELIGION.

IT has been somewhere said, that "man is a religious being;" and there is a sense in which it is true; but a little observation on his real character will convince us, that there is nothing in it truly worthy of the name of religion, unless it be implanted there by a divine power.

It is true, that in all ages of the world mankind have manifested some disposition to pay homage to the Deity; but whether among the savage inhabitants of the desert, or the more polished states of Greece and Rome, the Deity they have worshipped has been the idol of their own imaginations, and the homage they have presented has been impure in its origin, and degrading in its effects: sacrifices have been offered indeed, but in all cases where the votaries have been destitute of a divine revelation, the altar has been erected "To the unknown God."

Nevertheless, though the religion of nature be impure, and the dispositions it inspires, in great measure, hostile to the true character of God, there is a religion which is evidently produced by his power, supported amidst ten thousand opposing principles by his influence, and consummated by his infinite mercy: there is a "faith" of which Jesus Christ his Son is the "Author and Finisher," and a "holiness without which no man shall see the Lord."

This divine principle is not confined to any material temple. Its seat is the human heart; and whether its professors exhibit its external forms in the pomp and splendour of an episcopal dome, in the obscure recesses of a barn, or, we might add, beneath the shadow of a banian tree; that great Being whose name it bears will visit those hearts where it dwells with his all-cheering presence, and will accept the homage which is sincerely offered, through the merits of his Son.

Of what importance then must it be to our youth to be made acquainted with such a religion as this! and while much time is occupied in preparing for a state of being which must soon cease for ever, how desirable it is that their hearts should become the seats of this heavenly principle which will fit them for the society of "the spirits of the just made perfect" and of "God the Judge of all!"

We shall therefore endeavour to direct the attention of our youthful readers to those considerations which induce us to believe that the only true religion is that of the New Testament; first, by pointing out its superiority to every other system; and, secondly, by briefly stating those arguments which prove its divine origin.

EXCELLENCE OF THE CHRISTIAN DISPENSATION.

RELIGION, in the general sense of the word, is either true or false, pure or corrupted. True religion admits of two divisions; the religion of the Jews, and the religion of Christians. The first has its foundation in the Old Testament, or in the law which was given by Moses to the tribes of Israel, and is now abrogated or superseded by the clearer dispensation of the gospel. The second is the religion of the New Testament; which, for the dignity of its founder, the purity of its morals, the simplicity of its worship, and the greatness of its consolations, exceeds every thing that was ever proposed to the mind of man; stands eminently distinguished by all that can advance the glory of God, and the happiness of mankind; solicits, deserves, and shall at last obtain the joyful assent of all nations and people under heaven.

The false or spurious religions are two, Paganism and Mahometism. The first of these seems to be nothing more than a gross corruption of the religion of nature. The peculiarities of the other are founded in the imposture of Mahomet, and contained in the rhapsody of the Koran. This last took its rise in the seventh century, and has been considered ever since as the grand rival of Christianity. But, notwithstanding the progress of Mahometism in the world, and all that can be said in praise of its votaries, Christianity, we presume, has nothing to fear; she may

submit her pretensions to the severest scrutiny, and be assured of a determination in her favour.

Make the appeal to Natural Religion, or, which is the same thing to the reason of man. Set before her Mahomet, and his disciples arrayed in armour and in blood, riding in triumph over the spoils of thousands and tens of thousands, who fell by his victorious sword. Shew her the cities which he set in flames, the countries which he ravaged and destroyed, and the miserable distress of all the inhabitants of the earth. When she has viewed him in this scene, carry her into his retirements; shew her the prophet's chamber, his wives and concubines; let her see his adulteries, and hear him allege revelation and his divine commission to justify his lust and oppression. When she is tired with this scene, then shew her the blessed Jesus, humble and meek; doing good to all the souls of men, patiently instructing both the ignorant and perverse. Let her see him in his most retired privacies; let her follow him to the mount, and hear his devotions and supplications to his God. Carry her to his table, to view his poor fare, and hear his heavenly discourse. Let her see him injured, but not provoked. Let her attend him to the tribunal, and consider the patience with which he endured the scoffs and reproaches of his enemies. Lead her to the cross, and let her view him in the agonies of death, and hear his last prayer for his persecutors: "Father, forgive them, for they know not what they do!" When Natural Religion hath viewed both, ask her, which is the prophet of God. But her answer we have already heard, when she saw part of this scene through the eyes of the centurion who attended at the cross: by him she spoke, and said, "Truly this was the Son of God."

But what shall we say to those who are wise above all that is written, and will not believe any revelation at all? The best advice, perhaps, we need give them, is to read what has been said on both sides of the question, with equal attention, a mind truly open to conviction, and an honest determination to yield to the force of argument on which side soever it may be found to preponderate. And let them remember, that without this they cannot do justice to the importance of the subject, nor to that reason and conscience which they boast of, and which God has given them.

NECESSITY OF REVELATION.

THE probability of a divine revelation may be argued from the absurdities which attend the system of the deist, as well as from the character of the Supreme Being, who is exhibited to our view in the works of creation; but if we look to the disorders of society, and the moral state of mankind, we shall be induced to consider a revelation of the divine will as more than probable, as absolutely necessary.*

It indeed seems extremely unlikely, that the Divine Being would suffer mankind to have fallen into such great apostasy from him, as is every where manifest, without intending to render them assistance through which they may be recovered. He has made provision in the natural world for the removal of bodily disorders; can we then imagine that he will be altogether regardless of the much more dangerous diseases of the mind! It is, for example, a most deplorable degree of blindness to live utterly unconcerned about what we are; and it is a far more tremendous thing to live wickedly, to live as "without God in the world," when we are surrounded with his essence, and believe in his existence: yet the greater part of mankind are under one or other of these dismal infatuations; and there can be no reason assigned why they should ever be otherwise, unless they are roused from their slumber, or checked in their irreligious courses, by the voice of Deity.

Leave man to himself and to his own efforts, even when most actively inclined, and what can he accomplish? He is evidently formed for thinking; his intellectual part gives dignity to his character: to think correctly constitutes a prime duty; correct thinking is manifested in his contemplating himself, his author, and his end; and yet, how commonly does he neglect these enquiries to pursue trifling vanities, and "waste his strength in that which profiteth

* The Editor is indebted to a work of considerable celebrity for the substance of what is here offered on the subject of Religion. The work is entitled "Letters to a Friend, on the Evidences, Doctrines, and Duties of the Christian Religion, by Olinthus Gregory, Esq. LL.D." This work he most earnestly recommends to the attention of all those readers who wish to obtain a clear and interesting view of these important subjects.

not?" Or suppose he directs his unassisted intellectual energies into a more suitable channel, what does he effect? He has an idea, an inward perception of truth, not to be effaced by the sophistry of the sceptic; yet, on the most important topics, he has an incapacity of argument scarcely to be rectified but by supernatural aid. He wishes for truth, and obtains nothing but uncertainty. He pants after happiness, and finds only misery in substance, or the vacuity of disappointment. He is incapable of ceasing to wish both for truth and happiness; and yet perceives that he is equally incapable of attaining either certainty or felicity. He is also subject to a perpetual war between his reason and his passions. Had he reason without passions, or passions without reason, he might enjoy something like repose: but actuated as he is by both, he lives in perpetual disquiet; finding it impossible to yield himself to the guidance of the one, without experiencing the consequences of rebellion to the other. Hence is he always at variance with himself—always under the influence of contending principles; and how is he to emancipate himself from this thralldom? Suppose he seeks for freedom and repose, by pursuing the speculations of natural religion. He endeavours to lay the foundations of duty, to establish rules of conduct; he attempts to put them in practice, and fails. He is compelled to acknowledge himself a wanderer, and often doubtless a wilful wanderer, from the path of rectitude. He reasons without knowing it, upon the principles of an apostle, who said, "if our hearts condemn us, God is greater than our hearts, and will condemn us also;" and is thus led to institute enquiries relative to the pardon of sin, the nature, duration, misery, or happiness of a future state; respecting all which he finds it impossible to remove difficulties, or to be freed from the most trembling anxiety.

¶ The wide, the unbounded prospect lies before him;
But shadows, clouds, and darkness, rest upon it."

Even of those things which such an enquirer may be able to clear up to his own satisfaction, there will be many which it will be extremely difficult to communicate to others; considering, on the one hand, how abstruse many of his arguments will be; and on the other, that ignorance, indolence, prejudice, and secular cares, will, according to their individual or combined existence and influence, prevent the generality of persons from enquiring into the truth of what he

proposes, as well as from investigating these matters for themselves.

Could the doubts which envelope the subject of natural religion be dispelled by any one philosopher to his own satisfaction, yet he might want the inclination, or, if he possessed that, he must want the power, to make others adopt his views, and thus taste his enjoyments. Or, could, the great doctrines of religion and the rules of morality be settled, and proposed, and taught, ever so plainly or frequently, yet it would be difficult or indeed impossible to enforce the practice of them. A system of ethics may be considered, by those who acquaint themselves with it, as extremely ingenious; but it is entirely optional whether they will or will not adopt it as a rule of conduct; and the experience of all ages shows that it is perfectly ridiculous to expect that any such system should ever be considered as binding. Even were human laws established in aid of it, it would still be inefficacious; for no secular power, however it may restrain from crimes, can produce a single action that shall be truly and essentially virtuous. Either, then, God himself must interpose and favour us with rules of virtue, and motives to the practice of it, such as it is difficult to withstand, or the world must necessarily sink deeper and deeper into vice and misery. To admit the latter is to deny that the Supreme Being interests himself about the welfare of those whom he created and governs. Since, therefore, God is a being of matchless justice, mercy and bounty, it follows, irrefragably, that if the deficiencies of natural reason, or the inattention of mankind to the footsteps of his providence were such at any time (and such they have been) that all the inhabitants of the world were in danger of being lost in ignorance, irreligion and idolatry, then would God interpose by extraordinary instruction, by alarming instances of judgment or of mercy, by prophetic declarations of things to come, that is, by a supernatural revelation of his will, to make us better acquainted with his attributes and our own character, to point out to us the path of duty, to lead us from the vanities of the world, and to draw us to himself.

**GENUINENESS AND AUTHENTICITY OF THE
SCRIPTURES.**

THE Bible is not to be contemplated as one book, but as a collection of several, composed at different times, by different persons, and in different places. It is a collection of writings, partly historical, partly prophetic, partly didactic, composed some previously, some subsequently, to an important event, adverted to in most of them, called "the coming of the Messiah:" an event which is generally described as having a remarkable tendency to enhance the glory of God and the happiness of man. Now to believe the Christian religion, is to believe that Moses and the prophets, Christ and his apostles, were what they were described to be in these books; that is, were endued with divine authority, that they had a commission from God to act and teach us as they did, and that he will verify their declarations concerning future things, and especially those concerning a future life, by the event; it is to receive the Scriptures as our rule of life, as the foundation of our hopes and fears. Such a belief, that it may be operative, must have a substantial basis: and so varied and persuasive are the evidences of Christianity, that every man, whether his intellectual faculties are weak or strong, have been little or much cultivated, may obtain evidence suited to his circumstances. He who cannot enter into elaborate disquisitions concerning the credibility of the Scriptures, has other and often stronger grounds of faith. He may see the provision which the Bible makes for the restoration of man to happiness to be precisely such as his own necessities require; he may see that the purity of its commands has a wonderful tendency to elevate the nature of man, and to produce universal felicity: he may experience that actual change of heart and life which the gospel promises to all sincere believers; and then, as the apostle expresses it, "He that believeth on the Son of God hath the witness in himself," a witness that may grow and triumph during the decay of the mental faculties, the anguish of a sick bed, and the agonies of death. But the evidence of which we now intend particularly to speak, is that deducible from a more critical examination of the Bible itself, and from collateral

testimony drawn from historical and other indisputable sources.

Now any candid and reflecting person, when he first directs his attention to this wonderful volume, and notices the awful, authoritative, and momentous language which is often assumed in it, will be naturally impelled to enquire, *Is this book what it professes to be, the Word of God? Were its various authors instructed by God to relate the histories, state the doctrines, enforce the precepts, predict the events, which are the subjects of their respective books? Were they "holy men of God, who spake as they were moved by the Holy Ghost," or were they impostors?* Or to reduce these enquiries into a methodical form, it will be asked generally, *Are the books of the Old and New Testaments (excluding those which are avowedly apocryphal) genuine? Are they authentic? Are they inspired?* Here nothing is asked that is tautologous, nothing that is superfluous. For a book may be genuine that is not authentic; a book may be authentic that is not genuine; and many are both genuine and authentic which are not inspired. The history of Sir Charles Grandison, for example, is genuine, being indeed written by Richardson, the author whose name it bears; but it is not authentic, being a mere effort of that ingenious writer's invention in the production of fictions. The account of Lord Anson's Voyages, again, is an authentic book, the information being supplied by Lord Anson himself to the author; but it is not genuine, for the real author was Benjamin Robins, the mathematician, and not Walters, whose name is appended to it. Hayley's *Memoirs of the Life of Cowper*, are both genuine and authentic; they were written by Mr. Hayley, and the information they contain was deduced from the best authority. The same may be said of many other works, which, notwithstanding, lay no claims to the character of being inspired. These three characteristics of genuineness, authenticity, and inspiration, meet no where but in the books which constitute the Old and New Testaments. In order to establish this position, we shall now attend to the qualities of genuineness and authenticity, which will furnish ample employment for the present chapter; and shall consider that of inspiration in the next.

Here we shall first present you with three general propositions on the genuineness of Scripture, and then subjoin some such particular considerations drawn from the united testimony both of its enemies and its friends, as must, we

think, in conjunction with those propositions, remove all doubt from every candid mind.

I. Genuineness of the Scriptures proves the truth of the principal facts contained in them.

1. For, first, It is very rare to meet with any genuine writings professing to be real history, in which the principal facts are not true; unless where both the motives which engaged the author to falsify, and the circumstances which gave some plausibility to the fiction are apparent; neither of which can be alleged in the present case with any colour of reason. Where the writer of a history appears to the world as such, not only his moral sense, but his regard to his character and his interest, are strong motives not to falsify in notorious matters: he must, therefore, have stronger motives from the opposite quarter, and also a favourable conjuncture of circumstances, before he can attempt this.

2. As this is rare in general, so it is much more rare where the writer treats of things which happened in his own time, and under his own cognizance or direction, and communicates his history to persons under the same circumstances. All which may be said of the writers of the scripture history.

That this and the following arguments may be applied with more ease and perspicuity, we shall here, in one view, refer the books of the Old and New Testaments to their proper authors. It is assumed that the PENTATEUCH consists of the writings of Moses, put together by Samuel, with a very few additions; that the books of JOSHUA and JUDGES were, in like manner, collected by him; and the book of RUTH, with the first part of the book of SAMUEL, written by him; that the latter part of the first book of SAMUEL, and the second book, were written by the prophets who succeeded Samuel, probably Nathan and Gad; that the books of KINGS and CHRONICLES are extracts from the records of the succeeding prophets concerning their own times, and from the public genealogical tables, made by Ezra; that the books of EZRA and NEHEMIAH are collections of like records, some written by Ezra and Nehemiah, and some by their predecessors; that the book of ESTHER was written by some eminent Jew, in or near the times of the transactions there recorded, perhaps Mordecai, though some conjecture it was Ezra; the book of JOB by a Jew, probably by Moses; the PSALMS by David, Aaph, Moses, and other pious persons; the books of

PROVERBS and the CANTICLES by Solomon; the book of ECCLESIASTES by Solomon, towards the close of his life, when distress and anguish had reclaimed him from idolatry; the PROPHECIES by the prophets whose names they bear; and the books of the NEW TESTAMENT by the persons to whom they were usually ascribed. There are many internal evidences, and, in the case of the New Testament, many external ones too (which will be touched upon as we proceed) by which these books may be shown to belong to the authors here specified. Or, if there be any doubts, they are merely of a critical nature, and do not at all affect the authenticity of the books, nor materially alter the application of the arguments in favour of this proposition. Thus, if the Epistle to the Hebrews be supposed to have been written not by St. Paul, but by Clement, or Barnabas, or Luke, the evidence therein given to the miracles performed by Christ and his followers, will not be at all invalidated by this circumstance.

3. The great importance of the facts mentioned in the Scriptures, makes it still more improbable that the several authors should either have attempted to falsify, or have succeeded in such an attempt. This, indeed, is an argument for the truth of the facts, which proves the genuineness of the books at the same time. The truth of the facts, however, is inferred more directly from their importance, if the genuineness of the Scriptures be previously allowed. The same thing may be observed of the great number of particular circumstances of time, place, persons, &c. mentioned in the Scriptures, and of the harmony of the books with themselves, and with each other. These are arguments both for the genuineness of the books, and the truth of the facts distinctly considered, and also arguments for deducing the truth from the genuineness. And indeed the arguments for the general truth of the history of any age or nation, where regular records have been kept, are so interwoven together, and support each other in such a variety of ways, that it is extremely difficult to keep the ideas of them distinct, so as not to anticipate, and not to prove more than the exactness of logical method requires one to prove. Or, in other words, the inconsistency of the contrary supposition is so great, that they can scarcely stand long enough to be confuted. You may easily try this upon the history of England or France, Rome or Greece.

4. If the books of the Old and New Testament were written by the persons to whom they are described above,

that is, if they be genuine the moral characters of these writers afford the strongest assurance that the facts asserted by them are true. Falsehoods and frauds of a common nature shock the moral sense of common men, and are rarely met with except in persons of abandoned characters: how inconsistent, then, must those of the most glaring and impious nature be with the highest moral characters! That such characters are due to the sacred writers appears from the writings themselves, by an internal evidence; but there is also strong external evidence in many cases; and indeed this point is allowed in general by unbelievers. The sufferings which several of the writers underwent, both in life and death, in attestation of the facts delivered by them, is a particular argument in favour of these.

5. The arguments here alleged for proving the truth of the scripture history from the genuineness of the books, are as conclusive in respect of the miraculous facts, as of the common ones. But besides this, it may be observed, that if we allow the genuineness of the books to be a sufficient evidence of the common facts mentioned in them, the miraculous facts must be allowed also, from that close connection with the common ones. It is necessary to admit both or neither. It is not, for instance, to be conceived, that Moses should have delivered the Isarelites from their slavery in Egypt, or conducted them through the wilderness for forty years, at all, in such manner as the common history represents, unless we suppose the miraculous facts intermixed with it be true also. In like manner, the fame of Christ's miracles, the multitudes which followed him, the adherence of his disciples, the jealousy and hatred of the chief priests, scribes, and pharisees, with many other facts of a common nature are impossible to be accounted for, unless we allow that he did really work miracles. And similar observations apply in general to the other parts of the scripture history.

6. There is even a particular argument in favour of the miraculous part of the scripture history, to be drawn from the reluctance of mankind to receive miraculous facts. It is true that this reluctance is greater in some ages and nations than in others, and probable reasons may be assigned why this reluctance was, in general, less in ancient times than in the present (which, however, are presumptions that some real miracles were then wrought); but it must always be considerable from the very frame of the human mind, and would be particularly so amongst the Jews at the time

of Christ's appearance, as they had then (according to their own account) been without miracles for at least four hundred years. Now this reluctance must make both the writers and readers very much upon their guard; and if it be now one of the chief prejudices against revealed religion, as unbelievers unanimously assert, it is but reasonable to allow also, that it would be a strong check upon the publication of a miraculous history at or near the time when the miracles were said to be performed; that is, it will be a strong confirmation of such a history, if its genuineness be granted previously.

And, upon the whole, we may conclude certainly that the principal facts both common and miraculous, mentioned in the Scriptures, must be true if their genuineness be allowed.

II. The language, style, and manner of writing, used in the books of the Old and New Testament, are arguments of their genuineness.

1. Here let it be observed, first, That the Hebrew language, in which the Old Testament was written, being the language of an ancient people, and one that had little intercourse with their neighbours, and whose neighbours also spoke a language that had great affinity with their own, would not change so rapidly as modern languages have done, since nations have been variously mixed with one another, and commerce, arts, and sciences, greatly extended. Yet some changes there necessarily must be in about 1054 years elapsing between the time of Moses and that of Malachi. And accordingly critical Hebrew scholars assure us, that the biblical Hebrew corresponds to this criterion with so much exactness, that a considerable argument may thence be deduced in favour of the genuineness of the books of the Old Testament.

2. The books of the Old Testament have too considerable a diversity of style to be the work either of one Jew (for a Jew he must be, on account of the language) or of any set of contemporary Jews. If, therefore, they be all forgeries, there must be a succession of impostors in different ages, who have concurred to impose upon posterity, which is inconceivable. To support part forged, and part genuine, is very harsh; neither would this supposition, if admitted, be satisfactory.

3. The Hebrew language ceased to be spoken, as a living language, soon after the time of the Babylonish captivity; but it would be difficult or impossible to forge any thing in

it after it was become a dead language. For learned men affirm positively, that there was no grammar made for the Hebrew till many ages after; and, as it is difficult to write in a dead language with exactness, even by the help of a grammar, so it seems impossible without it. All the books of the Old Testament must therefore be, at least, nearly as ancient as the Babylonish captivity; and since they could not all be written in the same age (for the reason just assigned) some must be considerably more ancient; which would bring us again to a succession of conspiring impostors.

4. This last remark may perhaps afford a new argument for the genuineness of the book of Daniel, if any were wanting. But, indeed, the Septuagint translation, executed about 287 years before the Christian era, shows not only this, but all the other books of the Old Testament, to have been considered as ancient and genuine books soon after the times of Antiochus Epiphanes, at least.

5. There is a simplicity of style, and an unaffected manner of writing, in all the books of the Old Testament, (excepting only those parts that are avowedly poetical or prophetical) which is a very strong evidence of their genuineness, even exclusively of the suitableness of this circumstance to the times of the supposed authors.

6. The style of the New Testament also is remarkably simple and unaffected, and perfectly suited to the time, places, and persons. Let it be observed, that the use of words and phrases is such, as well as the ideas and method of reasoning, that the books of the New Testament could be written by none but persons originally Jews, which would bring the enquiry into a still narrower compass: for it would be impossible to devise any hypothesis which would satisfactorily account for the Jews telling such a story, and sacrificing their lives in attestation of it, unless the death and resurrection of Christ make an essential part of that hypothesis.

It may also be observed, that the narration and precepts of both the Old and New Testament are delivered without marks of hesitation; the writers teach as having authority; a circumstance peculiar to those who have both a clear knowledge of what they deliver, and a perfect integrity of heart.

And farther, that the care used in specifying that some of the Psalms were composed by Asaph, others by Moses,

some of the Proverbs by Lemuel, &c. furnishes another argument in favour of the genuineness of the books of Scripture, and leads us to infer that those books are the real productions of the authors to whom they are ascribed.

III. The very great number of particular circumstances of time, place, persons, &c. mentioned in the Scriptures, come in proof both of their genuineness and authenticity.

Here it is necessary to recite some of the principal heads under which these circumstances may be found. Thus there are mentioned in the book of GENESIS, the rivers of Paradise, the generations of the antediluvian patriarchs, the deluge with its circumstances, the place where the ark rested, the building of the tower of Babel, the confusion of tongues, the dispersion of mankind, or the division of the earth amongst the posterity of Shem, Ham, and Japhet, the generations of the postdeluvian patriarchs, with the gradual shortening of human life after the flood ; the sojournings of Abraham, Isaac, and Jacob, with many particulars of the state of Canaan, and the neighbouring countries in their times, the destruction of Sodom and Gomorrah, the state of the land of Edom both before and after Esau's time, and the descent of Jacob into Egypt, with the state of Egypt before Moses's time.

In the book of EXODUS are mentioned the plagues of Egypt, the institution of the passover, the passage through the Red Sea, with the destruction of Pharaoh and his host there, the miracle of manna, the victory of the Amalekites, the solemn delivery of the law from Mount Sinai, many particular laws both moral and ceremonial, the worship of the golden calf, and a very minute description of the tabernacle, priests' garments, ark, &c.

In LEVITICUS there is a collection of ceremonial laws, with all their particularities, and an account of the remarkable deaths of Nadab and Abihu.

The book of NUMBERS contains the first and second numberings of the several tribes, with their genealogies, the peculiar offices of the three several families of the Levites, many ceremonial laws, the journeyings and encampments of the people in the wilderness during forty years, with the relation of some remarkable events which happened in this period ; such as the searching of the land, the rebellion of Korah, the victories over Arad, Sihon, and Og, with the division of the kingdoms of the two last among the Gadites,

Reubenites, and Manassites, the history of Balak and Balaam, and the victory over the Midianites; all described with the several particularities of time, place, and persons.

The book of DEUTERONOMY contains a recapitulation of many things contained in the last three books, with a second delivery of the law, chiefly the moral one, by Moses, upon the borders of Canaan, just before his death, with an account of that death, and the true reason assigned why he saw, but did not enter, the promised land.

In the book of JOSHUA are related, the passage over Jordan, the conquest of the land of Canaan in detail, and the division of it among the tribes; including a minute geographical description.

The book of JUDGES contains a recital of a great variety of public transactions, with the private origin of some. In all, the names of times, places, and persons, both among the Israelites and the neighbouring nations, are noted with particularity and simplicity.

In the book of RUTH is a very particular account of the genealogy of David, with several incidental circumstances.

The books of SAMUEL, KINGS, CHRONICLES, EZRA, and NEHEMIAH, contain the transactions of the kings before the captivity, and of the governors afterwards, all delivered in the same circumstantial manner. And here the particular account of the regulations, sacred and civil, established by David, and of the building of the temple by Solomon, the genealogies given in the beginning of the first book of Chronicles, and the list of the persons who returned, sealed, &c. after the captivity, in the books of Ezra and Nehemiah, deserve particular notice, in the light in which we are now considering things.

The book of ESTHER contains a like account of a very remarkable event, with the institution of a festival in memory of it.

The book of PSALMS mentions many historical events, both common and miraculous, in an incidental way, or sometimes by way of celebration; and this, as well as the books of JOB, PROVERBS, ECCLESIASTES, and CANTICLES, allude to the manners and custom of ancient times, in various particulars.

In the PROPHECIES there are blended some historical relations; and in other parts the indirect mention of facts, times, places, and persons, is interwoven with the predictions in the most copious and circumstantial manner.

If we turn to the NEW TESTAMENT, the same observa-

tions present themselves at first view. Here, also, there are often comprehensive syllabuses of the leading facts in the Old Testament history comprised in a single chapter. It is also observable, that Jesus Christ, in his various conversations with the Jews, assumes the genuineness and authenticity of the Jewish Scriptures, that is, of the Old Testament books, and argues upon them. Thus we find him speaking of Moses as a lawgiver, referring to the decalogue, and various laws and observances mentioned in different parts of the Pentateuch, to Abraham, to Jacob, to the destruction of Sodom and Gomorrah, to the Queen of Sheba (mentioned in 1 Kings x.) and Solomon; to David as a prophet and as inspired; to "Moses and the prophets" generally; to Jonah as a type of himself; and to Isaiah, Jeremiah Ezekiel, Daniel, Hosea, Joel, and Malachi, as prophets. In the several parts of the New Testament, too, we have the names of friends and enemies, the conduct of both, the faults of friends told without gloss, those of enemies without exaggeration and virulence; the names of Jews, Greeks, and Romans, obscure and illustrious; the times, places, and circumstances and fact specified directly, and alluded to indirectly, with various references to the customs and manners of those times and places. And here again we may notice, by the by, that many of the historical books, both of the Old and New Testament, contain prophecies which have been fulfilled; and from which both their truth and their divine authority may be inferred.

1. Now, from the preceding enumeration it may be observed, first, That in fact we never find forged or false accounts of things to superabound thus in particularities. There is always some truth where considerable particularities are related, and they always seem to bear some proportion to one another. Thus there is a great want of the particulars of time, place, and persons in Manetho's account of the Egyptian dynasties, Ctesias's account of the Assyrian kings, and those which the technical chronologers have given of the ancient kingdoms of Greece; and, agreeable to this obvious principle, these accounts have much fiction and falsehood, with some truth. Whereas, Thucydides's history of the Peloponnesian war, and Cæsar's of the war in Gaul, in both which the particulars of time, place, and persons, are mentioned, are universally esteemed authentic to a great degree of exactness.

2. A forger, or a relater of known falsehoods, would be careful not to mention ~~the~~ great a number of particulars, since this would be to put into his reader's hands criteria

by which he may be detected. Hence appears one reason of the fact mentioned in the last paragraph, and which, in confirming that fact, confirms the proposition here to be established.

3. A forger, or—a relater of falsehoods, could scarcely furnish out such lists of particulars. It is easy to conceive how faithful records, kept from time to time by persons concerned in the transactions, should contain such lists; nay, it is natural to expect them, in this case, from that local memory which takes strong possession of the fancy in those who have been present at transactions: but it would be a work of the highest invention, and the greatest stretch of genius, to raise from nothing such numberless particularities, as are almost every where to be met with in the Scriptures.

There is, besides, a circumstance relating to the Gospels which deserves particular notice in this place. St. Matthew and St. John were apostles; and therefore, since they accompanied Christ, must have this local memory of his journeyings and miracles. St. Mark was a Jew of Judea, and a friend of St. Peter's; and therefore may either have had this local memory himself, or have written chiefly from St. Peter, who had. But St. Luke, being a proselyte of Antioch, not converted perhaps till several years after Christ's resurrection, and receiving his accounts from different eye-witnesses, as he says himself, could have no regard to that order of time which the local memory would suggest. Let us try now how the Gospels answers to their positions. Matthew's then appears to be in exact order of time, and to be a regulator to Mark's and Luke's, showing Mark's to be nearly so, but Luke's to have little or no regard to the order of time in his account of Christ's ministry. John's Gospel is like Matthew's in order of time; but as he wrote after all the other evangelists, and with a view only of recording some remarkable particulars, such as Christ's actions before he left Judea to go to preach in Galilee, his disputes with the Jews of Jerusalem, and his discourses to the apostles at his last supper, there was less opportunity for this evangelist's local memory to show itself. However, his recording what passed before Christ's going into Galilee might be in part from this cause; as Matthew's omission of it was probably from his want of this local memory. For it appears that Matthew resided in Galilee, and that he was not converted till some time after Christ's going thither to preach. Now this suitableness of the four gospels to their reputed

authors, in a circumstance of so subtle and reclusive a nature is quite inconsistent with the supposition of fiction or forgery. This remark is originally due to Sir Isaac Newton.

4. If we could suppose the persons who forged the books of the Old and New Testament to have furnished their readers with a great variety of particulars mentioned before, notwithstanding the two reasons here alleged against it, we cannot, however, conceive but that the persons of those times, when the books were published, must, by the help of these criteria have detected and exposed the forgeries or falsehoods. For these criteria are so attested by allowed facts, as at this time, and in these remote parts of the world, to establish the authenticity and genuineness of the Scriptures; and, by parity of reason, they would suffice even now to detect the fraud, were there any: whence we may conclude that they must have enabled the persons who were upon the spot when the books were first circulated, to do this; and the importance of many of the particulars recorded, and many of the renunciations required, would furnish them with abundant motives for this purpose. So that upon the whole it may be safely inferred, that the very great number of particulars of time, place, persons, &c. mentioned in the Scriptures, is a proof of their genuineness and truth; even independently of the consideration of the agreement of these particulars with history, natural and civil, and the agreement of the several books with themselves and with one another.

Were the proof of the genuineness and authenticity of the Scriptures to rest solely upon what has been already advanced, we might safely challenge the most learned men to adduce evidence of any thing like equal weight in proof of the genuineness of *Cæsar's Commentaries*, *Pliny's Letters*, *Livy's Roman History*, *Tacitus's Annals*, or any other pieces preserved to us from antiquity, and received without hesitation by all except madmen. But we are unwilling to quit a subject so copious and important without going still farther than this, and bringing forward other evidence in favour of particular portions of the Bible, from which their antiquity and genuineness will be placed in the most incontrovertible light.

Let us then, for a first example, enquire into particular proofs of the authenticity of the Pentateuch. And here the evidences are numerous, various, and striking: the following are the most prominent.

First, Ancient heathen writers testify to Moses and his writings in some way or other. Thus *Manetho*, *Cheremon*,

Apollonius, and Lysimachus, testify that Moses was the leader of the Jews, and the writer of their law. Eupolemus, Artapanus, Strabo, Trogus Pompeius, Chalcidius, and Juvenal, speak of Moses as the author of a volume which was preserved with great care among the Jews, by which the worship of images and eating of swine's flesh were forbidden, circumcision and the observation of the Sabbath strictly enjoined. Longinus cites Moses as the lawgiver of the Jews, and a person of no inconsiderable character: and adds, that he has given a noble specimen of the true sublime in his account of the creation of the world, when light was called into existence. Diodorus Siculus, in his catalogue of those lawgivers who affected to have received the plan of their laws from some deity, mentions Moses as ascribing his to that god whom he calls Jaoh, or Jah. And farther he speaks of Moses as a man illustrious for his courage and prudence, who instituted the Jewish religion and laws, divided the Jews into twelve tribes, established the priesthood among them with a judicial power, &c.

Secondly, The genuineness and authenticity of the books of Moses may be inferred from their being mentioned in other books of Scripture. Thus, in the book of Joshua, in both the books of Kings, in the second book of Chronicles, in the book of Ezra, of Daniel, of Malachi, the writing of the law is unequivocally ascribed to Moses. The divine mission of Moses is attested in the first book of Chronicles, in the Psalms, the prophecies of Isaiah and Jeremiah. Several of the miraculous facts recorded in these books, suggest to the prophets their finest images. Each of the five books of Moses is referred to, or separately quoted, by Christ himself in the gospels. And after his resurrection, his apostles add their testimony, not only to the fact that the law was written by Moses, but that it was written under the superindendence of inspiration.

Thirdly, The fact is affirmed in the books themselves. Thus, Exodus, "Moses wrote all the words of the Lord; and took the book of the covenant, and read it in the audience of the people." And again, in the book of Deuteronomy, which appears, as Bishop Watson observes, to be a kind of repetition or abridgment of the four preceding books—"When Moses had made an end of writing the words of this law in a book, until they were finished, Moses commanded the Levites which bare the ark of the covenant of the Lord, saying—Take this book of the law and put it into the side of the ark of the covenant of the Lord your God, that it

may be there for a witness against thee," In conformity with this it was testified full 800 years after, in the second book of Kings, and the second book of Chronicles : " Hil-kiah said to Shaphan the scribe, I have found the book of the law in the house of the Lord."—" Hil-kiah the priest found a book of the law of the Lord given by Moses."

Fourthly, Moses in these books gives a detailed account of various miracles openly wrought by himself, and of several miraculous interpositions of God in testimony of his divine mission : practices and ceremonies among the Jews were founded upon those miraculous events. The books of Moses also contain prophecies, as that which declares " that the seed of the woman shall bruise the serpent's head," and the prophecies of the dying patriarch Jacob. Now the existence of the customs and ceremonies proves the actual occurrence of the miraculous facts, and these establish the fidelity of the writings and the divine authority under which Moses acted. So likewise the accomplishment of the prophecies proves that they were dictated by God. Had not the miracles taken place, it would be absurd to imagine the books could ever have been received, or the practices we advert to introduced.

Lastly. That their reception among the Jews proves that they were written by Moses, and that what he affirms respecting the divine dictation of greater part of them is true. Paul says, " Even unto this day, when Moses is read, the veil is upon their heart," that is, the Jews are ignorant of the true spiritual meaning of the Mosaic writings. Whence it is evident, that in his time these writings were read regularly among the Jews, and had long been so. Again, Josephus, in his book against Appion, says, " We (the Jews) have two and twenty books which are to be believed as of divine authority, and which comprehend the history of all ages : five belong to Moses, which contain the origin of man, and the tradition of the succession of generations down to his death ; which takes it a compass of about three thousand years."

As to the Prophecies, the only other compositions in the Old Testament necessary to justify here, it may be observed, that they all entered the Septuagint version, which was executed at least 287 years before Christ, through the means of Demetrius Phalereus, and by the command of Ptolemy Philadelphus. Here, then, is strong evidence of the correctness of the original Greek translation. And the general correspondence of the Hebrew Bibles now in ex-

istence and of the Septuagint copies in Greek, is a proof that both have been handed down to us without material variation, and that either is therefore in the main genuine and authentic. Thus, then, we establish the existence of the prophetic books of the Old Testament (nearly as we now have them) at least 287 years before the Christian era; and we may farther remark, that most of them are referred to and quoted, often with high distinction, by Christ and his apostles.

That this latter testimony, however, may bear upon our enquiry with all the weight to which it is entitled, it is now requisite that we investigate the genuineness and authenticity of the New Testament. Now, first, it is indisputable, that the primitive publishers of Christianity wrote books containing an account of the life and doctrine of their Master, many of which bore the names of the several books which now constitute the New Testament: and, farther, passages cited from those books by very early writers, are found in the copies now existing of the respective books. Secondly, the early Christians had as good opportunities of satisfying themselves as to the genuineness of these books, as other ancients had with regard to the genuineness of books on other subjects which they received: and, since the new religion required considerable renunciations, and exposed its professors to heavy persecutions, it is unreasonable to suppose they would adopt it without a due examination. Thirdly, there were many books issued under the names of the apostles, which were, notwithstanding, rejected by the primitive Christians; which proves that they were not very open to deception. Fourthly, we do not find that either the Jews or the heathens, with whom the early Christian apologists were engaged, ever called in question the genuineness of the records to which their attention was called. Fifthly, the books of the New Testament were, in very early times, collected into a distinct volume. Thus, Eusebius says, that Quadratus and others, the immediate successors of the apostles, carried the Gospels with them in their travels. Melito speaks of the Old Testament, as in contradiction to the collection called the New Testament. Tertullian divides the Christian Scriptures into the Gospels and Apostles, and calls the whole volume the New Testament.

But, farther, the principal books of the New Testament are quoted or alluded to, by a series of Christian writers, in regular succession from the apostolic times. Ignatius, for example, became Bishop of Antioch thirty-seven years after

Christ's ascension. In his Epistles are undoubted allusions to the Gospels of Matthew and John, though they are not marked as quotations.

Polycarp, who had been taught by the apostles, and conversed with many who had seen Christ, has nearly forty allusions to the New Testament in one short epistle, several of them quoted, without hesitation, as the words of Christ. He obviously quotes from Matthew, Acts, Romans, Corinthians, Galatians, Ephesians, Philippians, Thessalonians, Timothy, Peter, and I John.

Justin Martyr, who died at latest about the year 168, has several distinct and copious extracts from the Gospels and the Acts. In all his works there are but two instances in which he refers to any thing, as said or done by Christ, which is not related in the Gospels now extant. All his references suppose the books notorious, and that there were no other accounts of Christ received and credited. He also says expressly, that the "Memoirs of the Apostles (which elsewhere he calls the Gospels) are read in public worship."

These persons, it should be remarked, though their testimonies concur, lived in countries remote from one another. Ignatius flourished at Antioch; Polycarp at Smyrna; and Justin Martyr in Syria.

In favour of the early existence of the principal books of the New Testament, we must not forget to urge that the first heathen adversaries of Christianity speak of the historical books as containing the accounts upon which the religion was founded. Celsus, for example, in the second century, writing against Christianity, alludes to books written by the disciples of Jesus. He accuses the Christians of altering the gospel, but this accusation is not made out by any important variations existing in the present day. He says his arguments are drawn from their own writings: and he evidently quotes from Matthew's and John's Gospels, from the Acts of the Apostles, from the various Epistles of Paul, Peter, and John. He makes the largest and most remarkable concessions about Jesus Christ; acknowledging the truth of his nativity, his journey into Egypt, his passing from place to place with his disciples, the fact of his miracles, his being betrayed, and lastly his passion and death: affirming, that after he was betrayed, he was "bound"—"scourged"—"stretched upon the cross"—that he "drank vinegar"—that after his death he was "said to have appeared twice"—but that "he did not appear to his enemies." It is true

he ridicules most of these particulars; but he does not attempt to deny them, which he would have been ready enough to do, could he have done it with any show of reason.

With regard to the Bible in general, including both the Old Testament (or Covenant) and the New, it has unexpectedly met with strong additional confirmation, as to the correctness of the most received versions, in the discoveries of recent travellers in India. Dr. Buchanan, especially, who in 1806 visited the fifty-five Syrian churches in Malayala, was informed by the inhabitants that no European had, to their knowledge, visited the place before. Their liturgy is derived from that of the early church at Antioch. They affirm, too, that their version of the Scriptures was copied from that used by the primitive Christians at Antioch, and brought to India before or about the council of Nice, A. D. 325, at which council some ecclesiastical historians inform us Joannes, Bishop of India, attended. These Syrian Christians allege also, that their copies have ever been exact transcripts of that version, without known error, through every age, down to this day. Dr. Buchanan is persuaded, that some of their present copies are of very ancient date: though written on a strong thick paper (like that of some MSS. in the British Museum, commonly called eastern paper) the ink has, in several places, eaten through the material in the exact form of the letter. In other copies, where the ink had less of a corroding quality, it has fallen off, and left a dark vestige of the letter, faint indeed, but not in general illegible. There is one volume found in a remote church of the mountains, which merits particular description:—it contains the Old and New Testaments, engrossed on strong vellum in large folio, having three columns in the page, and is written with beautiful accuracy. The character is Estrangelo-Syriac, and the words of every book are numbered. This volume is illuminated, but not after the European manner, the initial letters having no ornament. Prefixed to each book there are figures of principal scripture characters (not rudely drawn) the colours of which are distinguishable; and in some places the enamel of the gilding is preserved: but the volume has suffered injury from time or neglect, some of the leaves being almost entirely decayed. In certain places the ink has been totally obliterated from the page, and has left the parchment in its natural whiteness; but the letters can, in general, be distinctly traced from the impress of the pen, or from the partial corrosion of the ink. The Syrian church assigns to

this manuscript a high antiquity; and alleges that it has been for some centuries in the possession of their bishops; and that it was industriously concealed from the Romish inquisition in 1599; but its true age can only be ascertained by a comparison with old manuscripts in Europe of a similar kind, and from such a comparison its date has been referred to the seventh century.

This most valuable and interesting manuscript is now in England. Mar. Dionysius, the resident bishop at Cadanette, presented it to Dr. Buchanan, who again has presented it to the University of Cambridge, in whose public library it is now lodged. It has been lately examined with great care and skill by Mr. Yeates, who has published a more minute account of it than the above, in the *Christian Observer*. The existence of this manuscript will compel unbelievers to drop, as broken and pointless, their favourite weapon against the genuineness of our Scriptures. Its preservation may be considered as another interposition of divine Providence in favour of the Christian religion; another reward to European Christians for their zeal and activity in transmitting the benefits of the gospel to heathen nations.

INSPIRATION OF SCRIPTURE.

A FIRM and cordial belief of the inspiration of the Bible is of the highest moment; for unless we are persuaded that those who were employed in the composition of the respective books were entirely preserved from error, a conviction of their honesty and integrity will be but of little avail. Honest men may err, may point out the wrong track, however unwilling they may be to deceive; and if those who have penned what we receive as revelation are thus open to mistakes, we are still left to make the voyage of life in the midst of rocks, and shelves, and quicksands with a compass vacillating and useless, and our pole-star enveloped in mists and obscurity.

But some of these writers assure us that "all Scripture is given by inspiration of God," meaning, at least, the Jewish Scriptures; a declaration which deserves attention on the score of the general veracity by which we have already shown their assertions are always marked. Still, as a like claim is made by writers who, it has been ascertained, were

wicked and designed; let us enquire on what grounds and to what extent the divine inspiration of the Bible ought to be admitted.

Theologians have enumerated several kinds of inspiration; such as—an inspiration of superintendency, in which God so influences and directs the mind of any person as to keep him more secure from error in some complex discourse, than he would have been merely by the use of his natural faculties:—plenary superintendent inspiration, which excludes any mixture of error whatever from the performance so superintended:—inspiration of elevation, where the faculties act in a regular, and, as it should seem, in a common manner, yet are raised to an extraordinary degree, so that the composition shall, upon the whole, have more of the true sublime or pathetic than natural genius could have given:—and, inspiration of suggestion, in which the use of the faculties is superseded, and God does, as it were, speak directly to the mind, making such discoveries to it as it could not otherwise have obtained, and dictating the very words in which such discoveries are to be communicated, if they are designed as a message to others.

It is not our purpose to enter into any enquiry how far different portions of Scripture were composed unde, one or other of these kinds of inspiration. They are enumerated merely to shew that those who contend that Scripture is inspired, have not arrived at their decision by a gross and careless process, but by sedulous, critical, and discriminating investigation. We mean, however, to affirm, and we hope the references at the foot of the page will prove, that while the authors employed in the composition of the Bible exercised generally their own reason and judgment,* the Spirit of God effectually stirred them up to write;† appointed to each his proper portion and topic, corresponding with his natural talents, and the necessities of the church in his time;‡ enlightened their minds, and gave them a distinct view of the truths they were to deliver;§ strengthened and refreshed their memories to recollect whatever they had seen or heard, the insertion of which in their writings would be beneficial;§ directed them to select from a multitude of facts what was proper for the edification of the church, and neither more

* Psal. xlv. 1. Mark xii. 35. Luk. i. 3. Acts. i. 1. Pet. i. 11. † 2 Pet. i. 21.
 ‡ 2 Pet. i. 21. Matt. xxv. 13. § Jer. i. 11—16. xiii. 9—14. Ezek. i. 1—3. Dan. viii. 15—19. iv. 22—27. x. 1—8. Amos. vii. 7, 8. viii. 2. Zech. i. 10—21. iv. 11—14. v. 6. John xvi. 13. Eph. iii. 3, 4. 1 Pet. i. 10, 11. 2. Luke
 v. 3. John xiv. 26. Jer. xxxi. 3.

nor less ;* excited afresh in their minds such images and ideas as had been laid up in their memories, and directed them to other ends and purposes than themselves would ever have done of their own accord ;† suggested and imprinted upon their mind such matters as could not have been discovered or known by reason, observation, or information, but were subjects of pure revelation :‡ superintended every particular writer, so as to render him infallible in his matter, words, and order, especially whenever they related to facts, discourses, or doctrines, the communication of which is the great object of Scripture ; thus rendering the whole canon at any giving period, an infallible guide to true holiness and everlasting happiness.||

Now, that the Scriptures were actually dictated by an inspiration of this kind may be inferred both from the reasonableness and from the necessity of the thing. It is reasonable that the sentiments and doctrines, developed in the Scriptures, should be suggested to the minds of the writers by the Supreme Being himself. They relate principally to matters concerning which the communicating information to men is worthy of God : and the more important the information communicated, the more it is calculated to impress mankind, to preserve from moral error, to stimulate to holiness, to guide to happiness, the more reasonable is it to expect that God should make the communication in a manner free from every admixture or risk of error. Indeed the notion of inspiration enters essentially into our ideas of the revelation from God ; so that to deny inspiration, is tantamount to affirming there is no revelation. And why should it be denied ? Is man out of the reach of him who created him ? Has he, who gave man his intellect, no means of enlarging or illuminating that intellect ? And is it beyond his power to illuminate and inform in an especial manner the intellects of some chosen individuals—or contrary to his wisdom, to preserve them from error when they communicate to others, either orally or by writing, the knowledge he imparted to them, not merely for their own benefit, but for that of the world at large, in all generations ?

But farther, inspiration is necessary. The necessity of

* John xx. 30, 31. xxi. 25. 1 Cor. xiv. 22, 24. xv. 4. 1 Cor. x. 6—11. † Amos i. and ix. Acts xvii. 28. 1 Cor. xv. 33. Tit. i. 12. ‡ Gen. i. ii. iii. Lev. xxvi. Isa. xli. 22, 23. xlv. 1. xlvii. 9, 10. 1 Tim. iii. 16. || Deut. viii. 1—4 Psal. xix. 7—11. cxlvi. 1. 1 Cor. xii. 29. Luke xiv. 25—31. John v. 39. Rom. xv. 4. 2 Tim. iii. 15—17.

revelation has been shown in a former chapter; and the same reasoning, in connection with what has been just remarked, establishes the necessity of inspiration. Besides this, the subjects of Scripture render inspiration necessary. Some past facts recorded in the Bible could not possibly have been known had not God revealed them. Many things are recorded there of the future, that is, of the predicted, which God alone could foreknow and foretell, which notwithstanding came to pass, and which, therefore, were foretold under divine inspiration. Others, again, are far above human capacity, and could never have been discovered by men: these, therefore, must have been delivered by divine inspiration. The authoritative language of Scripture, too, argues the necessity of inspiration, admitting the veracity of the writers. They propose things not as matter for consideration, but for adoption: they do not leave us the alternative of receiving or rejecting; do not present us with their own thoughts; but exclaim, "Thus saith the Lord," and on that ground demand our assent. They must, of necessity, therefore, speak and write as they "were inspired by the Holy Ghost," or be impostors: and the last supposition is precluded by reasonings which have been brought forward before.

Very striking proofs of the inspiration of the Scriptures might be deduced from a consideration of their sublimity, their union of perspicuity with profundity, their piety, their pure and holy tendency, their efficacy, their harmony, and their miraculous preservation. But we shall leave you to reflect upon this at your leisure, and proceed to lay before you, as an argument of no small weight, the testimony of those who lived nearest the apostolic times on this point. They may naturally be expected, so far as is independent of the written word, to know more of the sentiments of those who, in regard to religious topics, "had the mind of Christ," than any Christians in subsequent ages. Consider in this view the weight of the following quotations:—

Clement Romanus says, that "the apostles preached the gospel, being filled with the Holy Spirit; that the Scriptures are the true word of the Spirit; and that Paul wrote to the Corinthians things that were true, by the aid of the Spirit."

Justin Martyr says, "that the Gospels were written by men full of the Holy Ghost; and that the sacred writers were moved by inspiration."

Irenæus says, that "all the apostles, as well as Paul, received the gospel by divine revelation; and that by the

will of God they delivered it to us as the foundation and pillar of our faith; that the Scriptures were dictated by the Spirit of God, and therefore it is wickedness to contradict them, and sacrilege to make any the least alteration in them."

Clement Alexandrinus says, "we that have the Scriptures are taught of God; that the Scriptures are established by the authority of God; that the whole Scripture is the law of God; and that they are all divine."

Origen says, that "the Scriptures proceeded from the Holy Spirit; that there is not one tittle in them but what expresses a divine wisdom; that there is nothing in the Law, or the Prophets, or the Gospels, or the Epistles, which did not proceed from the fullness of the Spirit; that we ought with the faithful to say, that the Scriptures are divinely inspired; that the Gospels were admitted as divine in all the churches of God; that the Scriptures are no other than the organs of God; that, if a man would not confess himself to be an infidel, he must admit the inspiration of the Scriptures."

Tertullian lays it down as a fundamental principle in disputing with heretics; "that the truth of doctrines is to be determined by Scripture;" and affirms most positively, "that Scripture is the basis of faith; that all Christians prove their doctrines out of the Old and New Testaments; and that the majesty of God dictated what Paul wrote."

Nearly all the other Christian writers in the first three centuries, whose performances have wholly or partly reached us, speak of the Scriptures as divine, call them the holy Scriptures, the sacred fountain, the divine fountains of salvation, &c. evidently implying their inspiration. And in those early ages the whole church agreed in sentiment, that no books should be received into the canon of Scripture of whose inspiration there was any doubt.

Thus, then, we see, that in the primitive ages the universal opinion was in favour of the inspiration of the Scriptures. Let us next enquire how far this opinion grows naturally out of an examination of the Scriptures themselves. Considered in relation to the present subject, the books of Scripture fall under three classes: the prophetic books; the historical books of the Old Testament; and the New Testament, being in part historical, in part doctrinal.

Now, as to the prophetic books, their divine authority and their inspiration follow at once from the completion of several of the predictions they contain: the entire fulfilment of the whole is essential to the argument.

The inspiration of the New Testament may be inferred from the language of our Lord, and that of the apostles. Thus, Jesus Christ promised extraordinary assistance to his apostles. He promised them "the Comforter," "the Holy Spirit," "the Spirit of Truth," who should "testify of him," "should teach them all things, bring all things to their remembrance whatsoever Christ had said unto them, should guide them into all truth, should abide with them for ever, and show them things to come."* Again, he says, "When the Comforter is come, whom I will send to you from the Father, even the Spirit of Truth, which proceedeth from the Father, he shall testify of me; and ye also [being so assisted] shall bear witness."† From these passages it is but fair and reasonable to conclude, that the aid of this heavenly guide was to be vouchsafed them on all suitable occasions; and surely no occasions could render it more expedient than when they were engaged in delivering written instructions, whether in the form of Gospels or of Epistles, which were intended for the edification of the Christian church till "time should be no longer." In fact, the Spirit could not abide with them for ever, in relation to the church, in any other way than by preserving the word they delivered from such human or diabolical depreciation and corruption as might render it injurious instead of being salutary.

It will also be worth our while to notice the remarkable language in which Jesus Christ promises his apostles the extraordinary assistance of the Spirit while they are defending his cause before magistrates. "Settle it therefore in your hearts not to meditate before what ye shall answer; for I will give you a mouth and wisdom, which all your adversaries shall not be able to gainsay or resist. Take no thought how or what ye shall speak; for it shall be given you in that same hour what ye shall speak; for it is not you that speak, but the Spirit of your Father that speaketh in you."‡ If this were to be the case when they pleaded before magistrates, how much more reason is there to conclude, that when they were writing for the use of all future generations, it was not so much they who wrote, as the Spirit of the Father who dictated to them, and thus wrote by them. For the occasion is evidently much more important in the latter instance than in the former: an error in their writings

* John xiv. 16---26. xvi. 13.
Matt. x. 19, 20. Mark xiii. 11.

† John xv. 26, 27.

‡ Luke xxi. 14, 15.

would have a much more extensive, permanent, and injurious influence than any error that could occur in a pleading or argument, necessarily of a transient impression, before a magistrate.

In estimating the authority claimed by the eight writers of the New Testament, we must not only consider their unbroken, unimpeachable integrity, but that five of them were of the number of the apostles to whom the promises just cited were made. Of the other three, one, namely Luke, is generally admitted to have been of the seventy disciples sent out by Christ, and who received the promise of divine superintendence and inspiration recorded in his Gospel.* With regard to Mark, if his own immediate inspiration cannot be established, that of his Gospel can, since it has never been questioned that he wrote under the superintendence of Peter, an inspired apostle. There then remains only Paul, who repeatedly and solemnly asserts his own inspiration, and his equality in every respect with all the other apostles; appealing to miracles publicly wrought by himself in proof of his divine commission.

That the apostles themselves had a full persuasion that they wrote under divine inspiration is evident from a great variety of texts; to some of the most important of which we shall refer you,† that you may consult them carefully, and allow them their full impression upon your mind. You will find too that the apostles considered themselves as communicating to the world a perpetual rule of faith and practice, which would be comprehended by all except the finally impenitent. "If," say they, "if our Gospel be hid, it is hid to them that are lost." On these accounts, as it should seem, they preferred themselves before the prophets not merely of their own but of preceding times, saying,‡ "God hath set in the church, first, Apostles; secondly, Prophets; thirdly, Teachers:" language which could not properly have been employed, had the apostles been inspired only to preach, and not to write; for in that case they would manifestly be inferior to the prophets, who, in their writings, as well as their oral denunciations, "spoke as they were moved by the Holy Ghost."

* Luke xii. 11, 12. See also Luke x. 16. † 1 Cor. ii. 10---16, iii. 21---23. xiv. 37. 2 Cor. ii. 10. iii. 5, 6. iv. 8. xi. 7. xiii. 3. Gal. i. 11, 12. Ephes. iii. 3---5, 10. iv. 11, 12. 1 Tim. i. 1. 1 Pet. i. 12, 21. 2 Pet. iii. 2, 15, 16. John x. 35. 1 John ii. 20. iv. 6. Rev. i. 1, &c. 1 Thess. i. 5. 2 Thess. ii. 13. ‡ 1 Cor. xii. 28.

The proceeding are arguments for the general inspiration of the writers of the New Testament: but it is necessary farther to remark, that the care with which the most voluminous writer among the apostles distinguishes between those instances in which he delivers the dictates of the Spirit, and those in which he presents merely his own private judgment, leads us naturally to infer, that wherever he has not made such distinction he ought to be understood as teaching with divine authority. Thus when he treats of the relative advantages and disadvantages of the single and the married state in the perilous times in which he lived, he says, "I speak this by permission, not by commandment." Again, a little farther on, "unto the married I command, yet not I, but the Lord." And soon afterwards, "to the rest speak I, not the Lord." Again,* "concerning virgins, I have no commandment of the Lord; yet I give my judgment." And once more, at the conclusion of the same chapter "She is happier if she so abide, after my judgment; and I think also that (in this particular) I have the Spirit of God." Is it not absurd to imagine that an apostle who guards his readers five times in one chapter against making his private judgment of equal authority with commandments dictated to him by God, would on all other occasions assume the authority of a divine and inspired teacher, without a full and perfect consciousness that had a just claim to it?†

These observations will, we trust, convince you, that the historical and doctrinal parts of the New Testament, and the prophetic portions of both the Old and New Testament, contain, in the complete sense of the phrase, "the word of God." It remains farther to state at least one cogent argument for admitting that the whole of the received Jewish Scriptures is entitled to the same character, and of course to the same submission of intellect and of heart. This we shall lay before you in the language of Dr. Doddridge, in his valuable Dissertation on the Inspiration of the Scriptures: "The inspiration, and consequently the genuineness and credibility of the Old Testament, may be certainly inferred from that of the New, because our Lord and his apostles were so far from charging the scribes and pharisees (who on all proper occasions are censured so freely) with having introduced into the sacred volume any merely human compositions; that, on the contrary, they not

† Cor. vii. 6, 10, 12, 25, 46.

† See also 2 Cor. vii. A.

only recommend a diligent and constant perusal of these Scriptures, as of the greatest importance to men's eternal happiness, but speak of them as divine oracles, and as written by the extraordinary influence of the Holy Spirit upon the minds of the authors.

"I desire that the following list of Scriptures may be attentively consulted and reflected on in this view. I might have added a great many more, indeed several hundreds, in which the sacred writers of the New Testament argue from those of the Old in such a manner as nothing could have justified but a firm persuasion that they were divinely inspired. Now as the Jews always allowed that 'the testimony of an approved prophet was sufficient to confirm the mission of one who was supported by it,' so I think every reasonable man will readily conclude, that no inspired person can erroneously attest another to be inspired; and indeed the very definition of plenary inspiration absolutely excludes any room for cavilling on so plain a head. I throw the particular passages which I choose to mention into the margin below; and he must be a very indolent enquirer into a question of so much importance, who does not think it worth his while to turn carefully to them; unless he have already such a conviction of the argument that it should need no farther to be illustrated or confirmed."

Here, then, may safely terminate our enquiry into the inspiration of Scripture. We have ascertained that it is the word of God, and, if we read it attentively, we shall soon find it profitable "for doctrine, for instruction, for reproof." Let us, therefore, believe and rejoice "that the grace of God which bringeth salvation hath thus appeared to all men; to the end that denying ungodliness and worldly lusts, we should live soberly, righteously, and godly, in this present world; looking for that blessed hope, and the glorious appearing of the great God, and our Saviour Jesus Christ."

* John v. 39. Matt. iv. 4, 7, 10. Mark xii. 24. Luke x. 26, 27. Matt. v. 17, 18. xxi. 42. xxii. 29, 31, 43. xxiv. 15. xxvi. 54, 56. Luke i. 67, 69, 70. xvi. 31. xxiv. 25, 27. John vi. 31. x. 35. Acts ii. 16, 25. iii. 22, 24. iv. 25. xvii. 11. xviii. 24, 28. xxviii. 25. Rom. iii. 2, 10. ix. 17, 25, 27, 29. x. 5, 11, 16. xi. 4. xvi. 26. 1 Cor. x. 11. 9 Cor. x. 13. vi. 16, 17. Gal. iii. 8. 1 Tim. v. 18. 2 Tim. iii. 15, 16. Heb. i. 1, 5. Jam. ii. 8. iv. 5. 6. 1 Pet. i. 10, 12. 2 Pet. i. 19, 21.

PRINCIPAL DOCTRINES OF CHRISTIANITY.

The more intimately we become acquainted with Christianity, as depicted in the New Testament, the more forcibly shall we be struck with the wisdom of its constitution. It does not insult and triumph over man by prescribing him a code of laws which he cannot obey, by referring him to statutes every one of which he has broken, and commanding him to preserve them entire; but it takes man as he is, provides for his restoration, points out the means of salvation, invites him to embrace those means, and then presents him with precepts, by the observance of which he may "adorn the doctrine of God his Saviour in all things." The scheme by which all this is effected is, doubtless, extraordinary; but it is not less worthy of acceptance on that account. Had it not been far beyond human capacity, and human discovery, it need not have been revealed. God need not make supernatural communications to reveal to us what might have been found out by a natural process. Having ascertained that the Bible is the word of God, it is our duty to receive all it makes known to us (whether it coincide or not with our preconceived notions) without appeal to any other quarter. "I cannot comprehend the reason of this," may an enquirer after scriptural truth often say, "but it is God who declares it; I receive it on his authority, and I humbly rely upon his promise, that what I know not now, I shall know hereafter."

It is of extreme importance to have right views of the Christian system, because our eternal safety depends upon it. A man of plain understanding, who has no previously adopted system to favour, who reads for the sake of arriving at truth, and who therefore attaches to Scripture its most palpable and obvious meaning, will soon find that the evangelical scheme is this:—God, foreseeing the fatal apostasy into which the whole human race would fall, did not determine to deal in a way of strict severity with us, so as to consign us over to universal ruin and inevitable damnation; but, on the contrary, determined to enter into a treaty of peace and reconciliation, and to publish to all whom the gospel should reach, the express offers of life and glory, in

a certain method which his infinite wisdom judged suitable to the purity of his nature, and the honour of his government. This method is so astonishing and peculiar, that for man to have proposed it, independent of divine teaching, would have approached to blasphemy ; and to have believed it on any other than divine authority, next to impossible. " God so loved the world as to give his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life." He sent into the world " the brightness of his glory, and the express image of his person," partaker of his own divine perfections and honours, to be not merely a teacher of righteousness and a messenger of grace, but also a sacrifice for the sins of men. Accordingly, at such a time as infinite wisdom saw most fitted for the purpose, the Lord Jesus Christ was born " of a Virgin,"* and appeared in human flesh : after he had fulfilled the whole law, gone through incessant fatigues, and borne all the injuries which the ingratitude and malice of men could inflict, he voluntarily " submitted himself to death, even the death of the cross," and, having been " delivered for our offences, was raised again for our justification."† Forty days after his resurrection he " ascended into heaven," in sight of his disciples, where he has become our Intercessor ; and, agreeably to his promise, sent down his Spirit upon his apostles to enable them, in the most persuasive and authoritative manner, " to preach the gospel ;" giving it in charge to them and their successors to publish it " to every creature ;" and declaring that all who repent and believe in that gospel may be saved, by virtue of its abiding energy, and the immutable power and grace of its divine Author.

It is possible that a belief of these truths, striking and momentous as they are, may float loosely in the understanding, without being efficacious. But they are exquisitely formed to affect us deeply ; and whenever the secret links which connect the understanding and the heart are acted upon by the mysterious energy of him " who knoweth our frame" and all its hidden springs, this belief leads to that saving change which is called conversion. Then he who is the subject of it becomes " a new creature ; old things are passed away ; behold, all things become new." He has new apprehensions of things, new hopes, new fears, new joys, new sorrows, new affections, new employments, new prospects ; he feels a perfect renovation of character ; and his

* Isa vii. 14. Matt. i. 23. Luke

† Rom. iv. 25.

greatest solicitude is to be " fellow-worker with God, and a fellow-heir with the saints."

The Christian religion, as portrayed in the gospel, differs from all others in furnishing an internal principle from which the purest conduct emanates. It is not a religion of forms and ceremonies, but, as was before observed, the religion of the heart. The language of God to every Christian is, " My son, give me thine heart." The true Christian, as depicted in the New Testament, is a faithful and active servant, who enquires what his Lord's will is, and performs it with cheerful alacrity. He makes it " his meat and his drink to do the will of his heavenly Father ;" and he knows that, conformably with that will, he must " relieve the fatherless and widows in their affliction, and keep himself unspotted from the world." He considers it his duty, and finds it his delight to please God, and render as far as possible his fellow-creatures happy : to " add to his faith, virtue ; and to virtue, knowledge ; and to knowledge, temperance ; and to temperance, patience ; and to patience, godliness ; and to godliness, brotherly kindness ; and to brotherly kindness, charity." Still he walks as ~~on~~ the confines of the eternal world, and is anxious therefore to be " dead unto the world" and " alive unto God," to attain more and more of the divine image, to " grow up to Christ in all things," to enjoy " fellowship with God," and, " if he be risen with Christ, to seek those things which are above, where Christ sitteth at the right hand of God."

Such are the dispositions and the employments which are required to be exemplified in the sincere Christian. He is exhorted to flee from a contrary temper and conduct by the assurance that " the wrath of God abideth on" all those who reject the offers of the gospel ; and he is stimulated to persevere in the Christian course by the assurance that heaven is the inheritance of every sincere and humble follower of Jesus. His hopes are constantly directed to that happy period when he shall be " ever with the Lord, to behold" and participate in " his glory." He lives under the persuasion that, after he has passed through the " valley of the shadow of death," God will wipe away all tears from his eyes, and he will be no more exposed to pain or sorrow, to mourning or death. He believes that his spirit will be united to his glorified body in those delightful regions, where an enemy shall never enter, and from whence a friend shall never depart ; where there will be satiety without disgust, day and no night, joy and no weeping, difference in degree and yet all full, " love without dissimulation," excellency without

envy, multitudes without confusion, harmony without discord; where the understanding shall be astonishingly enriched, the will perfectly satisfied, the affections all transformed into love and joy; where "the Lamb, who is in the midst of the throne, shall feed him, and lead him unto living fountains of waters;" where God shall be the light and the glory of the place for ever and ever!

These, in brief, are the doctrines of the New Testament, the "fruits of the Spirit," manifested in those who believe, and the glorious expectations of a future world, which are intended at once to stimulate and to reward "a patient continuance in well doing." But these," it may probably be said, "are not recognized by many who call themselves Christians; for there are many that profess a belief in Christianity, who nevertheless ridicule the idea of living under its power."

It will therefore be necessary to state these important doctrines in a more particular manner, with some of the principal arguments which may be deduced from Scripture in support of them.

The Fall of Man, and the Depravity of Human Nature.

The history of the fall of man is, succinctly related in the third chapter of the book of Genesis. Its effects are indelibly marked upon every individual, inasmuch as "in Adam all die;" and even upon the earth itself, which, still groaning under the original malediction, brings forth "thorns, and thistles, and briers," and thus will continue to do till "the restitution of all things." These are not, as has been often insinuated, the notions of men of distempered minds, made imbecile by infirmity, or soured by disappointment; but of the wisest and best men in all ages. Consult the writings of the Christian Fathers; or attend to the language of the Reformers, and especially to the founders of the English Church. "Forasmuch," say they, "as the true knowledge of ourselves is very necessary to come to the right knowledge of God, ye have heard how humble all good men ought always to think of themselves."—"The Holy Ghost, in writing the holy Scripture, is in nothing more diligent than pulling down man's vain-glory and pride, which of all vices is most universally grafted on all mankind, even from the first infection of our first father Adam."—"Of ourselves we be crab trees, that can bring forth no apples. We be of ourselves of such earth, as can but bring forth weeds,

nettles, brambles, briars, cockle, and darnel. Our fruits be declared in the fifth chapter of Galatians. We have neither faith, charity, hope, patience, chastity, nor any thing else that good is, but of God; and therefore these virtues be called there the fruits of the Holy Ghost, and not the fruits of man."—"We are of ourselves very sinful, wretched, and damnable. Of ourselves, and by ourselves, we are not able either to think a good thought, or work a good deed, so that we can find in ourselves no hope of salvation, but rather whatsoever maketh unto our destruction. O Israel, thy destruction cometh of thyself, but in me only is thy help and comfort."*

But many will say, in opposition to all this, "We admit the fact of the great, though not universal wickedness that prevails in the world; but we cannot assent to what you give as the natural history of it. We do not think it inseparable from man's present nature, but an accidental acquisition! we do not ascribe it to the influence of a hereditary taint, but conceive it to be the effect of imitation and custom, of acquired habit, of corrupt example, of injudicious tuition." This, by the way, is only saying in other words, that depravity is the effect of depravity. Let us, however, examine the matter a little more closely. That vile passions may in some be the result of improper tuition or of imitation, we have no inclination to deny! but they cannot always be referred to such an origin. How often do we see children in the veriest infancy exhibit strong and unquestionable indications of boisterous tempers, obstinacy, or impatience. How often do children of the most pious parents—who are so brought up as, during the first six or seven years of their lives, never to witness any species of crime, any instances of ingratitude, of falsehood, or deception, or any indulgence in irascible passions—furnish painful, proofs that they can be deceivers, wilful liars, ungrateful, passionate, malignant, and unforgiving. These instances, no doubt, occur very frequently, when it is impossible to ascribe them to imitation. But suppose the contrary were admitted, the opposers of the scriptural doctrine would gain nothing by the concession. For of whom could a child acquire iniquity by imitation, but of some one who was born before him? And whom did that person imitate but some one born before him? And where must this series terminate? If you say any where short of the first man, you

* Homily on the Misery of all Mankind

have to account for the remarkable phenomenon of sin's making its first inroad at the identical time, and fixing upon the identical person, you have selected : and this will be found infinitely more difficult than extending the series to the great progenitors of the human race. Besides, does not the very circumstance of an aptitude to imitate evil rather than good, indicate something like that hereditary taint, which is brought forward to contravene and supersede ? Can an inherent tendency to imitate evil, an undeviating propensity to slide into vice (unless the strong hand of moral discipline, or the suasive influence of divine grace prevent) be fairly or rationally ascribed to any thing less than such a cause as that with which the Bible makes us acquainted ? Persuing this train, you will see that the scriptural solution of the difficulty before us is reasonable ; and that it has the farther advantage of showing, that moral evil was not, as some have been presumptuous enough to assert, produced by the Creator, but contracted by the creature, who, though he was endowed with power to stand, was free to fall."

Moses gives us the result of the observation of Deity, and not of the fallible man, when he says, " God saw that the wickedness of man was great in the earth, and that every imagination of the thoughts of his heart was only evil continually." And again after the deluge, " The Lord said, The imagination of man's heart is evil from his youth."*

The language of the Psalmist, descriptive of himself and of all men in his time, is not less descisive. " Men are corrupt : they have done abominable works ; there is none that doeth good. They are all gone aside ; they are altogether become filthy ; there is none that doeth good, no not one." " I was shapen in iniquity, and in sin did my mother conceive me." " If thou, Lord, shouldest mark our iniquities, O Lord, who shall stand ?" " In thy sight shall no man living be justified."†

The Epistles of Paul are full of passages of the same import. The following may be selected. " Jews and Gentiles are all under sin." " All have sinned, and come short of the glory of God." " Death hath passed upon all men, for that all have sinned." " By the disobedience of one, many were made sinners." " The Scripture hath concluded all under sin, that the promise by faith in Jesus Christ might be given to those who believe." " All of us likewise lived

* Gen. vi. 5. viii. 21 † Psal. xiv. 1, 3. li. 5 cxxx. 3. cxliii. 2

formerly in the desires of our flesh, &c. ; and were by nature children of wrath, even as others." " If one died for all, then were all dead."*

But though the powers of man are vitiated, and his inclinations to evil are so strong that they will never be thoroughly subdued but by divine influences; yet God, who cannot be otherwise than holy, continues still to demand a perfection of obedience. Ours is a moral inability to fulfil the law : but he who knows the heart can, and has graciously promised he will ultimately destroy this inability, by communications from himself. Though we cannot of ourselves fulfil what God requires in his law, yet we " can do all things through Christ, who dwelleth in us." If we " live according to the flesh, we must die hereafter : but if through the Spirit we mortify the deeds of the body we shall live."† God condescends, by the dispensation of the gospel, to pardon and except the humble, sincere, penitent sinner, on account of the perfect obedience and atoning sacrifice of his own Son, who died to deliver his people from the power of sin, as well as from the punishment due to it. On both these accounts we are solicited to come to him " that we may have life." The invitations of the gospel are free and open to all : yet this should not cause us to sink into supineness, or to treat the invaluable gift with indifference ; for the blessings of redemption are restricted to penitent believers, and to them alone.

The Atonement for Sin, by the Death of Jesus Christ.

" God so loved the world, that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life."‡ Such is the remarkable language of the great Head of the church, concerning himself. It is important for us to determine the precise meaning of this proposition ; and therefore to enquire whether we believe in him when we consider him as one who came merely to teach us and to set us an example, or when we farther regard him as one who died a sacrifice for sin.

It appears that the latter is the correct interpretation of the passage : and that, therefore, though the preaching of " Christ crucified was unto the Jews a stumbling-block, and unto the Greeks foolishness," both in the primitive and most

* Rom. iii. 9, 23. v. 12, 19.
† Rom. viii. 13.

John iii. 16.

Gal. iii. 22.

Ephes. ii. 3.

2. Cor.

succeeding times, yet it is a genuine and awfully momentous Christian doctrine, that Christ by his death has made atonement or satisfaction for the sins of all those who truly repent, and return unto God in the way of sincere though imperfect obedience.

This great truth has been believed and defended by good men in all ages. It is clearly stated by the venerable fathers of the English church, and by many of the most profound, eloquent, and learned of the episcopal clergy.

In a question of such moment, however, you will naturally look for something higher than human authority, and this doctrine is so obvious to the unprejudiced mind in every part of the sacred writings that it will be sufficient to refer you to the texts of Scripture at the foot of the page,* which are in unison with every part both of the Old and New Testament.

Surely, if language have any definite meaning, the texts declare the innocence of Jesus Christ who suffered, and the iniquities of those for whom he suffered ; they declare, that a righteous person died for the guilty, and that thereby the guilty were saved. Hence arises the grand difference between the dispensations of the law and of grace. The law requires perfect obedience and satisfaction to be wrought out in our persons : grace allows of the obedience and satisfaction of a substitute. The law makes no allowance for the least failure, but says, " He that offendeth in the least tittle, is guilty of all ; the soul that sinneth shall die : " grace says, " If any man sin, we have an advocate with the Father, Jesus Christ the righteous." The law demands sternly, " Pay me that thou owest : " but grace points to the " handwriting of ordinances, blotted out and cancelled by the blood of Jesus ; " so that we can say, " Behold, O God, our shield, and look upon the face of thine Anointed," who manifested his love to his friend Lazarus by his tears, and to us by shedding his blood for us, while we were enemies !

" A truth so strange, 'twere bold to think it true ;
If not far bolder still to disbelieve."

YOUNG.

In order to impress on your minds the important considerations connected with this doctrine, we shall conclude this subject with the following powerful expostulation of our

* Gal. vi. 14. 1 Cor. v. 7. Rom. v. 6, 8, 11. 1 Cor. v. 20 2 Cor. v. 18, 21
Ephes. ii. 16. v. 2. 1 Tim. ii. 6. Tit. ii. 14 Heb. ix. 11, 16, 18, x. 28 29
See also Heb. ii. 14. and ix. 22

Reformers: "Canst thou think of this, O sinful man, and not tremble within thyself? Canst thou bear it quietly, without remorse of conscience and sorrow of heart? Did Christ suffer his passion for thee, and wilt thou show no compassion towards him? While Christ was yet hanging on the cross, and yielding up the ghost, the Scripture witnesseth that the veil of the temple did rend in twain, and the earth did quake, that the stones clave asunder, that the graves did open, and the dead bodies rise; and shall the heart of man be nothing moved to remember how grievously and cruelly he was handled of the Jews for our sins? Shall man show himself to be more hard-hearted than stones, to have less compassion than dead bodies! Call to mind, O sinful creature, and set before thine eyes Christ crucified: think thou seest his body stretched out in length upon the cross, his head crowned with sharp thorns, and his hands and his feet pierced with nails, his heart opened with a long spear, his flesh rent and torn with whips, his brows sweating water and blood: think thou hearest him now crying in an intolerable agony to his Father, and saying, My God, my God, why hast thou forsaken me; Coudest thou behold this woeful sight, or hear this mournful voice, without tears, considering that he suffered all this not for any desert of his own, but only for the grievousness of thy sins? Oh, that mankind should put the everlasting Son of God to such pains! Oh, that we should be the occasion of his death, and the only cause of his condemnation! May we not justly cry, Woe worth the time that ever we sinned? O my brethren, let this image of Christ crucified be always printed in our hearts; let it stir us up to the hatred of sin, and provoke our minds to the earnest love of Almighty God. For why? is not sin, think you, a grievous thing in his sight, seeing for the transgression of God's precept he condemned all the world unto perpetual death, and would not be pacified, but only with the blood of his own Son?" *

The Divinity of Jesus Christ.

Many learned and ingenious men disbelieve the divinity of Christ: but neither the process by which they have arrived at their disbelief, nor that by which they endeavour to prove that we are in error, seem calculated to operate

strongly upon the minds of those who have been previously persuaded that the Scripture is the production of inspired writers, who were so inspired that they might teach doctrines infallibly true (many of which could be known no other way) and whose instructions, therefore, are to be implicitly received. Having ascertained that the Bible is the word of God, we have nothing to do but to determine its plain and obvious meaning, and receive it as true. But this is not the plan pursued by those who deny the divinity of the Messiah. They constantly examine the Scriptures rather as critics than as humble enquirers after truth; the natural consequence of which is, that they are critical beyond measure, and adopt those "refinements in criticism which make men nauseate what is obvious, and pursue through the mazes of etymology what was never imagined before." This, indeed, is the necessary result of adopting a defective hypothesis. If both the divine and human natures meet in the person of the Messiah, and if they are essentially distinct though they are inseparably united, then is it to be expected that some passages should clearly announce his divinity, others as clearly his humanity, while others may (perhaps indistinctly) indicate both. But if Jesus Christ be merely man, then all those texts which declare his divine nature, or indicate his compound nature, must either be rejected as spurious, or explained away by the arts of criticism. Hence Socinians argue, that when Jesus is called "the Son of man," the words must not only be construed in the most literal, but in the most restricted sense, so that the word man shall be understood to mean one particular man: but when he is called "the Son of God," they must be explained to mean knowledge, commission, affection, office; any thing or nothing, provided it be not taken literally.

The scheme of theology, which includes the divinity of Jesus Christ as an essential and fundamental part, is free from these puerilities and absurdities. According to this scheme, we believe that Jesus Christ is a man; that he is also God; yet we do not believe that the man Jesus is deified. We do not worship the man Jesus; but we do worship the God who dwells in the man; for "in him dwelleth all the fullness of the Deity bodily:" and "through him we have access, by one Spirit, unto the Father." We

do not deny that there is something mysterious in this: for in our present state we do not expect to arrive at the full "knowledge of the mystery of God, in which are hidden all the treasures of wisdom and knowledge;"* nor do we forget that the Scriptures are intended rather to reveal what God is in relation to us, than what he is in himself. In our system the difficulty is so transferred, that it lies in the object, not in the terms; and this is natural, because the object of worship is spiritual and infinite. In metaphysics we have many equal difficulties; and even in the spiritual part of our own nature. Thus, our soul as the three distinct faculties of understanding, memory, and will, proceeding in succession from each other; yet they are co-existent, and constitute not three souls, but one soul. Indeed, in the usual transactions of life, we frequently, nay commonly, know the use of objects, while we continue ignorant of their nature: and, in like manner, it will be to our benefit, if we immediately endeavour to experience the use of religious truths, and not wait until we can perfectly comprehend them.

Having premised thus much respecting the different modes of procedure of those who embrace and those who reject the doctrine of the divinity of Jesus Christ, we shall now direct your attention to a few of the arguments upon which this great truth seems to be irrefragably established.

I. The divine nature of Jesus Christ was foretold by some of the prophets, either explicitly, when speaking of the Messiah, or by describing works and characteristics of God, which the apostles have declared were referable to Jesus Christ.

Thus, the prophet Isaiah, in a passage where he clearly predicts the coming of the Messiah, describes his person and character in the following terms:

"For unto us a child is born, unto us a son is given: and the government shall be upon his shoulder: and his name shall be called Wonderful, Counsellor, The mighty God, The everlasting Father, The Prince of Peace." "Of the increase of his government and peace there shall be no end."† In another portion of his prophecy Isaiah says, "And he shall be for a sanctuary; but for a stone of stumbling and for a rock of offence to both the houses of Israel." The apostle Peter says, Jesus Christ is that "stone of stumbling, and rock of offence."‡

* Col. ii. 2, 3.

† Isa. ix. 6, 7.

‡ Isa. viii. 14. 1 Pet. ii. 8.

The same prophet predicts the coming of one who should be the harbinger of God, and cry, "Prepare ye the way of the Lord, make straight in the desert a highway for our God." St. Matthew applies this prediction especially to John the Baptist,* who was the forerunner of Jesus Christ. But unless Jesus be Jehovah, this prophecy cannot apply to John the Baptist.

Isaiah again, in another place, says, in the name of "Jehovah," "Look unto me, and be ye saved, all the ends of the earth: for I am God, and there is none else." "Unto me, every knee shall bow, every tongue shall swear." "In the Lord shall all the seed of Israel be justified, and shall glory."† Paul applies this prophecy to Christ, the Judge of all: "As I live, saith the Lord, every knee shall bow to me, and every tongue shall confess to God."‡

If any words can communicate definite ideas, the grand truth, conveyed by the preceding passages is, that the Messiah possesses the divine nature and attributes, and is therefore entitled to confidence and worship as God.

II. The prophecies, miracles, language, and conduct of Jesus Christ, furnish indubitable proofs of his divinity.

The Jewish prophets, when about to announce future things, waited till something extraneous roused within them the prophetic spirit, and then plainly indicated that they were animated by the foreign impulse. Not so the Messiah. He prophesied with the same ease, calmness, and composure, as he spoke: the future mysteries and events which he predicted, were not suddenly infused into his mind; they were familiar objects to him, always present to his view, their images always (if we may so say) existent within himself: all ages to come were prefigured clearly in his capacious intellect. So that, whether he foretold his own sufferings and death, the destruction of the temple, the resurrection of the dead, or the awful solemnities of the day of judgment, he manifested the same undisturbed tranquillity.

Thus again, with regard to his miracles, such was his "mighty power," that they bore no marks of dependence. He stilled the raging of the sea without any effort. He raised the dead with as great ease as he performed the most simple and gentle command, and the dead to come forth from their guarding the by-standers against

† Isa. xlv. 22, 23, 25.

‡ Rom. xiv. 11

forming too high conceptions of him on these accounts, he informed them, that whatever wonder was operated by his Father on earth, he likewise performed; and that his Father's works were his. He attributed to himself all the grand things he performed. Was this the conduct of a true prophet, if he had been only a prophet?

Jesus Christ, we find, is continually representing himself as equal to his Father. "I and my Father," says he, "are one."* He acquaints us that he hath come down from heaven, and that he hath quitted the bosom of God; that he was before Abraham; that he was before all things; that eternal life consists in the knowledge of the Son as well as in the knowledge of the Father; that it is not a servant, but a Son, that abideth for ever;† that if the Son make his people free, then shall they be free indeed.

Such conduct, and such declarations, were calculated to excite homage and worship: and how did Jesus Christ receive it? Paul and Barnabas rent their garments when they were taken for gods, and restrained the people who wished to worship them. Peter also, when the devout Cornelius fell down at his feet and worshipped him, forbid him, saying, "Stand up; I myself also am a man."‡ In the same spirit the angel in the Apocalypse, when St. John prostrated himself to worship him, rejected the homage with horror, saying, "See thou do it not: I am a fellow-servant with thee, and with my brethren, who bear testimony to Jesus; worship God."§ But Jesus Christ tranquilly suffered divine honours to be rendered him; commended the faith of the disciples who worshipped him, and who with Thomas called him their "Lord and their God;" and even confuted his enemies who contested his deity and his celestial origin. Was this the way to prove that he was nothing more than man?

III. The testimony of the apostles is decidedly in favour of the divinity of our Lord.

Stephen, an apostle, and the first martyr, when dying, invokes the "Lord Jesus to receive his spirit." The apostles perform their miracles not in the name of Jehovah, in that of "Jesus of Nazareth:" and they uniformly give to him the epithets, the attributes, and the works which are peculiar to deity. They tell us, that, conformably

* John x. 30. † John viii. 35, 42, 59, &c. ‡ Acts xiv. 11--18, x. 25, 26.
§ Rev. xix. 10.

to prophecy, "his name is Emmanuel, God with us." Moreover John turned "many to the Lord their God." "Christ is Lord of all." "We shall all stand before the judgment-seat of Christ; and every one give an account of himself to God." "The second man is the Lord from heaven."†

Quotations tending to establish the same point might be extended almost indefinitely; but if the real object of enquiry be to arrive at truth, the preceding will be quite sufficient.

We cannot, however, pass from the subject before us without intreating you to bear in mind that it is, strictly speaking, fundamental. Different religions are distinguished one from another by their having different objects of worship, and proposing different grounds of hope. Considered in this light, the religion of him who admits and him who rejects the deity of Christ, are as essentially different as the religions of the Jew and the Christian. This is no uncandid remark; but one founded in the nature of things, and justified by the conduct of both parties. If Jesus Christ be a mere man, those who worship him are guilty of idolatry: in that case the Socinians rightly call them idolaters. If, on the other hand, Jesus Christ be God incarnate, then "whosoever denieth the Son hath not the Father, while he that acknowledgeth the Son hath the Father also;" "he that hath the Son hath life, and he that hath not the Son hath not life;"‡ they are as opposite in their nature as the dead and the living, and it is as impossible for them to unite cordially together in religious worship.

The character the Redeemer now sustains renders this a matter of infinite moment. Jesus has "ascended into heaven, and sitteth at the right hand of his Father," "far above all principalities and powers." Here was our Prophet and Teacher; there he is incessantly pleading for his people; nay, there he both intercedes as our High-priest, and sits and reigns as King. He governs all things in heaven and on earth, that he may defend his church, adorn her with his spirit, and procure and accomplish her eternal salvation. "But from thence he shall come to judge the quick and the dead." "for the Father judgeth no man; but hath given all

judgment to the Son; that all may honour the Son as they honour the Father."* May the contemplation of this great event stimulate us sedulously to seek, and heartily to embrace the truth. For "behold he cometh with clouds, and every eye shall see him, and they also which pierced him." "Then will they say to the mountains and rocks, Fall on us, and hide us from the face of him that sitteth upon the throne, even from the wrath of the Lamb; for the great day of his wrath is come, and who shall be able to stand?" While the meek and humble and upright followers of Jesus will exclaim in grateful triumph, "Lo, this is our God; we have waited for him, and he will save us: this is the Lord, we have waited for him; we will be glad and rejoice in his salvation."

The Nature and Necessity of Conversion.

This subject is one of the highest moment, and yet, unfortunately, is one respecting which the greatest and most lamentable mistakes have prevailed. Some have imagined that religious conversion, or regeneration, is effected by baptism, so that whoever is baptized is, of necessity, regenerated. This, however, is neither consistent with Scripture nor with fact, except in those very rare instances in which the "baptism with water," and that "with the Holy Spirit," occur at the same moment. Gibbon and Hume were baptized in their infancy, but lived and died infidels; Simon Magnus was baptized, but certainly not regenerated: and we have known some who, though they were baptized when adults, on the profession of faith, afterwards relapsed into an open denial of the truth, and a daily neglect of the duties of Christianity: from which it is evident, that baptism and regeneration are not necessarily connected. Others have considered repentance to be regeneration; but neither is this correct. True repentance often terminates in regeneration, and, indeed, is commonly connected with it; but it is not the thing itself. Others, again, regard reformation and regeneration as synonymous; but this notion is as incorrect as either of the former. Regeneration may accompany baptism, repentance, or reformation; but it is more than either of

them. Saul became "another man," without becoming a new man; Ahab "humbled himself," yet became not truly humble; many repent of some great iniquity, but relapse again into evil courses; and some reform their conduct because the state of their health, or perhaps the monitions of conscience lead them so to reform, though they still remain ignorant of "the one thing needful."

To guard you against these and other erroneous views of conversion, to which your attention may sometimes be called, we shall endeavour to describe it concisely as it is portrayed in Scripture, our only unerring guide with respect to this and every other Christian doctrine.

And here it must be evident to every impartial reader of the word of God, that the mutation, which we are now to contemplate, can neither be slight nor transient, nor in general slow. In the principal texts where it is delineated it seems either named or characterized in reference to one or other of two modes of circumstances of change, both of which are important and usually rapid, compared with the corresponding duration of existence: these are conversion and regeneration; the one indicating frequently a turning from one thing towards another, and in theology, according to Dr. Johnson's definition, "a change from a state of reprobation to a state of grace;" and the other a new creation, or a new birth: or, according to the same lexicographer, "birth by grace to a Christian life." The selection and classification of a very few texts will show that the two general terms just mentioned, are not artificially forced into the technology of theologians, but are those which most naturally convey the idea of the change they are chosen to describe.

The prophet Jeremiah had manifestly something more in view than a mere nominal passage from one religion to another when he fancied Ephraim, after bemoaning himself, to pray, "Turn thou me, and I shall be turned; for thou art the Lord my God."* And again in his faithful exhortation to the Jews, "Turn ye again now every one from his evil way, and from the evil of your doings."† More expressive still is the language of Joel, "Rend your hearts, and not your garments, and turn unto the Lord your God, for he is gracious."

The language of [redacted] to his disciples was. "Except

ye be converted, and become as little children, ye shall not enter into the kingdom of heaven. He that heareth my word, and believeth on him that sent me, hath passed from death unto life.”*

The apostles speak of this change as equally momentous ; their divine Master taught them to preach to the Gentiles, that they might “ turn them from darkness to light, and from the power of Satan unto God, that they might receive forgiveness of sins by faith.” They therefore acted under the persuasion that, if any one erred from the truth, and one converted him, that he which “ converted the sinner from the error of his way, saved a soul from death :” and considered this conversion as “ a deliverance from the power of darkness, and a translation into the kingdom of God’s dear Son.”†

Among the numerous texts which evince this great change to be no less than an entire renovation of character, the following deserve notice. “ Create in me a clean heart, O God ; and renew a right spirit within me.”‡ “ I will put a new spirit within them ; and I will take the stony heart out of their flesh, and will give them a heart of flesh ; that they may walk in my statutes, and keep my ordinances, and do them.”§ “ Unless a man be born again, he cannot see the kingdom of God.”||

From these passages it must appear that the grand transformation we are now contemplating is not ideal, nor does it merely consist in enlightening and convincing the understanding, in a change of sentiments, or a change of outward conduct ; though it often includes all these. A man may change his religious opinions, or his outward conduct, without experiencing a change of heart : and, on the other hand, a person may experience a genuine and complete change of heart (and the heart, it must never be forgotten, is the seat of true religion) without being able to trace the slightest difference in any one article of his creed. Every one knows, that in a certain sense the world is vanity, that he must die, that in the hour of death riches will not profit him, that time is precious, that the portion of it allowed us to prepare for eternity is uncertain and often short, that a death-bed repentance is not an infallible passport to heaven ; and many know that they are sinners, that

* Matt. xviii. 3. John v. 24. † Acts xxvi. 18. James v. 9. Col. i. 13.
‡ Psalm li. 10. § Ezek. xi. 19, 20. || John iii. 3.

"Christ Jesus came to save sinners," that there is one, and only one way of salvation. Yet though these are known and received as truths, they are not felt as such : they want the Promethean fire to give them life and animation ; or to drop so profane an allusion on so solemn an occasion, they are but as the new formed body of Adam, before "God breathed into his nostrils the breath of life," and need a touch from Him, who alone can effectually (whether immediately, or by his own appointed instruments) reach the soul, to render them living, operative, efficacious sentiments.

In regeneration, so much of the light of heaven is let into the soul as enables us to know (or at least to begin to know) ourselves aright, to know God in his most awful and lovely manifestations, to see the enormity of sin, the "beauty of holiness," the worth of the gospel, the "riches of divine grace." It is a light accompanied with warmth and vigour, that produces an internal and permanent change ; a change that is universal, reaching to the heart, and evinced in the life ; that renovates the powers of the spirit, dissipates folly, guilt, darkness, and sorrow, and introduces holiness, joy, and hope.

This change is rightly called conversion : not because it converts the subject of it from vivacity to lifelessness, from cheerfulness to gloom, from kindness and affability to churlishness and reserve ; but because it converts him "from the error of his way," from the abuse to the proper use of the blessings with which he is surrounded, from a false to a true hope, from indifference to zeal, from "the power of Satan unto God." It is also as rightly denominated regeneration ; for it brings the person who experiences it, not under the influence of the mechanical transports of animal nature, or the blind impulses of a heated imagination, or into the delusive paths of enthusiasm ; but into a new state, through the operation of the Spirit of God upon the spiritual part of man. Surely there can be nothing essentially chimerical, nothing contrary to reason, nothing that is not highly ornamental and infinitely beneficial to our natures, in having the powers of our mind thus changed by energy imparted from God, and having our pursuits directed after such objects as are most worthy the attention and regard of intelligent, accountable, immortal creatures ! "To have our apprehensions of divine and spiritual things enlarged, and to have right conceptions of the most important matters ; to have the stream of our affections turned from empty vanities to objects that are proper to excite and fix them ; to have our

resolutions set against all sin, and a full purpose formed within us of an immediate reformation and return to God, with a dependence on his grace to help us both to will and to do; to have our labours stedfastly applied, to conquer sin, and to promote religion in ourselves and others; to have our entertainments founded in a religious life, and flowing in upon us from the sweet intercourse we have with God in his word and ordinances, and the delightful conversation that we sometimes have with Christian friends; and, finally, to have our hopes drawn off from earthly things, and fixed upon eternity! Where is there any thing can be more honourable to us, than thus to be renewed after the image of him that created us, and to put on the new man, which after God is created in righteousness and true holiness? And where is any thing that can be more desirable than thus to have the darkness of our understandings cured, and the disorders rectified that sin had brought upon our nature? Who is there that is so insensible of his depravity, as that he would not long for such a happy change? Or who is there that knows how excellent a work it is to be transformed by the renewing of the mind, that would not with the greatest thankfulness adore the riches of divine grace, if it appear that he is thus become a new creature, that old things are passed away, and all things are become new?"*

That such improvements of character often have occurred, and are often taking place now, cannot be denied by any philosophic observer of human nature: to disregard them, or to neglect an investigation of their cause, is to neglect one of the most interesting and remarkable classes of facts observable amongst mankind. Who has not either heard of or witnessed the most extraordinary changes of conduct, produced through the apparent influence (to say the least) of religious motives? to say nothing here of three thousand converted in one day at the feast of the Pentecost—of the conversion of St. Paul, and others mentioned in the Acts of the Apostles—because those are usually ascribed to the miraculous and extraordinary influences of the Holy Spirit in the apostolic times. But we may call your attention to matters of more recent occurrence. We have witnessed instances of men running eagerly the career of folly and dissipation, who have been suddenly arrested, and changed from "lovers of pleasure to lovers of God." Others

* Doddridge's Sermons on Regeneration.

who have devoted themselves early to the military profession, who literally knew no fear, who have spent their lives in the pursuit of glory, have approached the verge of life full of scars and full of honours, still panting after "glory, honour, and immortality," but thinking nothing of "eternal life;" till touched by an irresistible hand, they have been transformed from good soldiers to "good soldiers of Jesus Christ," have buckled on "the armour of God, fought the good fight of faith," and, following "the Captain of their salvation," have obtained "the victory," and been rewarded with unfading laurels.

Here we are constrained to notice the memorable advice given by the late Dr. Price to Lord Shelburne, the father of the present Marquis of Lansdowne. That nobleman enquired of the philosophic doctor what would be the best means of reforming some profligate, idle, worthless fellows, who were employed on some of his estates; and was recommended to "introduce a zealous methodist preacher among them." Here the reasoning was from a fact, and that no other than the preaching of Whitfield and Wesley among the Kingswood colliers. "These were men who required not only to be *Christianized*, but *humanized*. It was a mighty mass of deformity, without shape or order; and it was moulded into the human form; nay more, it received the impress of the divine image, by the agency of the Holy Spirit, through the preaching of these laborious ministers. The world will not easily forget the transformation; when men who had scarcely any thing about them human but their external transfiguration, changed their very nature, when the ferocious became softened, and the profane exemplary for the simplicity of holiness; and when the tears chased each other down their dark cheeks, as they listened to the declarations of a Saviour's love, while the total alteration of their life and manners bore no resemblance to 'the morning cloud and the early dew which passeth away.'"

Perhaps it may not be uninteresting for us to fix our attention upon the leading particulars of some remarkable and well authenticated instance of conversion, and in this respect we cannot do better than refer you to the life of Colonel James Gardiner (p. 600 in this work) a man who most strikingly exhibited the beneficial effects of this divine change throughout the whole course of his life.

Be it remembered then, that true repentance and conversion reduce all holy resolutions to actions, and either create religion, or transfer it from the head to the heart,

there to reside permanently as an actuating principle. "He that resolves to live well when a danger is upon him, or a violent fear, or when the appetites of lust are newly satisfied, or newly served, yet, when the temptation comes again, sins again, and then is sorrowful, and resolves once more against it, and yet falls when the temptation returns, is a vain man, but no true penitent, nor in the state of grace; and if he chance to die in one of those good moods is very far from salvation: for if it be necessary that we *resolve* to live well, it is necessary we should *do* so. For resolution is an imperfect act, a term of relation, and signifies nothing but in order to the actions. It is as a faculty to the act, as spring to the harvest, as eggs are to birds, as a relative to its correspondent, nothing without it. No man therefore can be in the state of grace and actual favour of resolutions and holy purposes; these are but the gate portal towards pardon: a holy life is the only perfection of repentance, and the firm ground upon which we can cast the anchor of hope in the mercies of God through Jesus Christ."*

The Influences of the Spirit.

Among the several momentous doctrines that are developed in the system of revelation, none seems to have experienced a reception less consistent with the natural order of things, than that of the influence of the Spirit of God upon the mind and conduct of man. This doctrine is so compatible with the dictates of unassisted reason, that several of the heathen philosophers firmly believed it, and unambiguously asserted it.

Numerous passages also might easily be extracted from the Christian apologists and other writers in the first four centuries, to elucidate and confirm the same great truth. But to reduce this branch of our enquiry into as narrow compass as possible, we lay before you the sentiments of the venerable English Reformers, as they are represented in the *Homilies*: that their notions on this point were sufficiently clear and decisive will appear from a quotation or two. "The charity wherewith we love our brethren (say they) is verily God's work in us. If after our fall we repent, it is by

* Bishop Taylor's *Holy Living*.

him that we repent, which reacheth forth his merciful hand to raise us up. If we have any will to rise, it is he that preventeth our will, and disposeth us thereto. If after contrition we feel our consciences at peace with God through remission of our sin, and so be reconciled again to his favour, and hope to be his children and inheritors of everlasting life; who worketh these great miracles in us? Our worthiness, our deservings, our wits, and virtue? Nay, verily, St. Paul will not suffer flesh and blood to presume to such arrogancy, and therefore saith all is of God." "Without his lively and secret inspiration can we not once so much as speak the name of our Mediator, as St. Paul plainly testifieth; no man can once name our Lord Jesus Christ, but in the Holy Ghost. Much less should we be able to believe and know those great mysteries that be opened to us by Christ."* Consistent with this is the language of a very great majority of religious writers from the Reformation down to the present time.

Christians then ascribe, or ought to ascribe, every intellectual, moral, and spiritual attainment to God. And when we speak of the ordinary influences of the Spirit of God, we mean to impute to the operation of that Spirit our sanctification—all the actions of our Christian course—our constancy and perseverance—all particular graces and virtues which we seek at his hands—our adoption—our access to God and assistance in prayer—our "joy and peace in believing"—our support in trials and afflictions, and deliverance from temptations—our continual progress in holiness: and we affirm that these gifts are not offered to here and there a favoured individual, but to all sincere Christians in every age of the church; for, when speaking of the promise of the Spirit, the declaration of Peter was as universal as language could make it—"the promise is to you and to your children; and to all that are afar off (either in point of space or of time) to as many as the Lord our God shall call."

That this opinion is compatible with the uniform tenor of Scripture will be made evident by consulting the texts referred to at the foot of the page,† from which it appears that it is not a mark of ignorant enthusiasm, but of pious

* Homily for Rogation Week. † 1 Cor. xii. 3, 4. See also ver. 6. 1 Cor. ii. 12. 1 Cor. vi. 11. Rom. ~~14~~, 14, 26.

reliance upon the divine promises, to expect the assistances of the Spirit of God, when they are humbly sought in the way of his appointment. The mode in which these influences are communicated may be indefinitely diversified, but the effect will uniformly be the improvement of the religious character, a more complete emancipation from the domination of the passions, from the slavery of sin ; or, to express the continued effect in Scripture phraseology, it will be "growth in grace." In accomplishing this, the whole circle of means and instruments, animate and inanimate, by which we are circumscribed, is within the reach of God and at his command. Sometimes he has resource to alarming dispensations of his providence, which awaken a sense of the fluctuating nature of all terrestrial sources of enjoyment, teach us our dependence upon him, and lead us to repose our entire confidence on him alone. At other times he employs the conversations, the arguments, perhaps the faithful remonstrances, of Christian friends, to stimulate us in the path of duty, and point us to "the fountain of living waters." At others, and this most frequently, he makes use of "the word of truth" either read or preached : this he has assured us he will "render lively and powerful, sharper than a two-edged sword, piercing, even to the dividing asunder of soul and spirit, and to be a discernor of the thoughts and intentions of the heart,"* and thus, by putting life into it, cause it by an irresistible energy to communicate spiritual life to our souls. Sometimes he operates upon us by the recollection of past occurrences, and "while we are thus musing, the fire of divine love burns" within us.† On such occasions he can awaken a dormant idea which lay neglected in the memory, can secretly attract the attention of the mind to it, can enable, nay compel us to trace its various relations, can throw a lustre upon things which were obscure, place those which seemed remote immediately before our mental eye, suspend the operation of secular objects, dispel the clouds of prejudice; impart an unusual power to what was before considered as trifling or unworthy present regard, convince us fully and practically of the vanity of all enjoyments except those which are consecrated by religion, and thus effectually lead us to "fix our affections on things above." In these and numerous other ways, there may be a real operation of the Spirit of God upon men's minds,

* Heb. iv. 12. † Psalm xxxix. 3.

though they may be utterly unconscious of it. His energy is not the less real because it is silent, secret, and unperceived: for here, as well as in the management of the natural world,

"Alone He works in all, yet he alone
Seems not to work." T. OMSON.

To ridicule, disbelieve, and deny all this, has of late been reckoned an indication of a powerful and philosophic mind: yet it requires but a cursory examination to perceive that such is a spurious criterion of true elevation either of sentiment or character; and to affirm, on the contrary, that with only our present knowledge of human intellect and of divine power, the denial of spiritual influences is as unphilosophical as it is impious.

As this topic falls peculiarly within the province of ministers of the gospel, we shall terminate this chapter by a quotation from an excellent modern author, whose eloquence and piety on this, as on all occasions, mutually adorn and exalt each other.

"Though a general attention to the duties of piety and virtue, and a careful avoidance of the sins opposed to these, are certainly included in a becoming deportment to the Holy Spirit, perhaps it is not all that is included. The children of God are characterized in Scripture by the being 'led by the Spirit:' led, evidently not impelled, not driven forward in a headlong course, without choice or design; but being, by the constitution of their nature, rational and intelligent, and by the influence of grace rendered spiritual, they are disposed to obey at a touch, and to comply with the gentle insinuations of divine grace; they are ready to take that precise impression which corresponds with the mind and purpose of the Spirit. You are aware of what consequence it is in worldly concerns to embrace opportunities, and to improve critical seasons; and thus, in the things of the Spirit, there are times peculiarly favourable, moments of happy visitation, where much more may be done towards the advancement of our spiritual interest than usual. There are gales of the Spirit, unexpected influences of light and power, which no assiduity in the means of grace can command, but which it is a great mark of wisdom to improve. If the husbandman is attentive to the vicissitudes of weather, and the face of the sky, that he may be prepared to take the full benefit of every gleam of sunshine, and every falling shower, how much more alert and atten-

tive should we be in watching for those influences from above, which are necessary to ripen and mature a far more precious crop!

“ Permit me to suggest two or three heads of enquiry. You have sometimes felt a peculiar seriousness of mind, the delusive glare of worldly objects has faded away, or become dim before your eyes, and death and eternity appearing at the door, have filled the whole field of vision. Have you improved such seasons for fixing those maxims, and establishing those practical conclusions which may produce an habitual sobriety of mind, when things appear under a different aspect? You have sometimes found, instead of a reluctance to pray, a powerful impulse to that exercise, so that you felt as if you could do nothing else. Have you always complied with these motions, and suffered nothing but the claims of absolute necessity to divert you from pouring out your hearts at the throne of grace? The Spirit is said to make intercession for saints with groanings which cannot be uttered: when you have felt those ineffable longings after God, have you indulged them to the utmost? Have you spread every sail, launched forth into the deep of the divine perfections and promises, and possessed yourselves as much as possible of the fulness of God? There are moments when the conscience of a good man is more tender, has a nicer and more discriminating touch than usual; the evil of sin in general, and of his own in particular, appears in a more pure and piercing light. Have you availed yourselves of such seasons as these for searching into ‘the chambers of imagery,’ and while you detected greater and greater abominations, been at pains to bring them out and slay them before the Lord? Have such visitations effected something towards the mortification of sin? Or have they been suffered to expire in mere ineffectual resolutions? The fruits which godly sorrow produced in the Corinthians, are thus beautifully portrayed: ‘What carefulness it wrought in you, yea what clearing of yourselves, yea what indignation, yea what fear, yea what vehement desire, yea what revenge!’ There are moments in the experience of a good man, when he feels more than ordinary softness of mind; the frost of selfishness dissolves, and his heart flows forth in love to God and his fellow-creatures. How careful should we be to cherish such a frame, and to embrace the opportunity of subduing resentments, and of healing those scars and wounds which it is scarcely possible to avoid in passing through this unquiet world!

Remember, we as Christians profess a peculiar relation to God as his children, his witnesses, his people, his temple; the character of that glorious Being and of his religion will be contemplated by the world, chiefly through the medium of our spirit and conduct, which ought to display, as in a mirror, the virtues of him who hath called you out of darkness into his marvellous light. It is strictly appropriate to the subject of our present meditations, to remind you that you are 'temples.' 'For ye,' says the apostle, 'are the temples of the living God, as God hath said, I will dwell in them, and walk in them, and I will be their God, and they shall be my people.' What purity, sanctity, and dignity may be expected in persons who bear such a character! A Christian should look upon himself as something sacred and devoted, so that what involves but an ordinary degree of criminality in others, in him partakes of the nature of sacrilege; what is a breach of trust in others, is in him the profanation of a temple. Let us watch and pray that nothing may be allowed a place in our hearts that is not suitable to the residence of the holy and blessed God. Finally, having such great and precious promises, dearly be'oved, let us cleanse ourselves from all filthiness of flesh and spirit, perfecting holiness in the fear of the Lord.*

Justification by Faith.

It is the humiliating fact, that "all having sinned and come short of the glory of God,"† that renders the Christian religion necessary. Or, in other words, it is because "by the works of the law no flesh living can be justified," that the new dispensation was requisite. If obedience be at all times our duty, in what way can present repentance release us, as some would argue, from the punishment of former transgressions? Can repentance annihilate what is past? Or can we do more, by present obedience, than acquit ourselves of present obligation? Or does the contrition we experience, added to the positive duties we discharge, constitute a surplussage of merit, which may be transferred to the reduction of our former demerit? "We may as well affirm," says a learned divine, "That our former obedience atones for our present sins, as that our present obedience makes amends for antecedent transgressions." No man can discharge an old

* Letter on the Work of the Spirit, by R. Hall, A. M.

† Isai. li. 11.

debt merely by taking care to incur no fresh ones; and, in like manner, since sin is a debt to divine justice (which demands undeviating rectitude and holiness) when once incurred it would not be cancelled merely by abstaining from sin in future; supposing it were possible that sin could be entirely avoided without the aid of that restraining and invigorating principle which is implanted in the heart of a sincere believer on his conversion. The question, then, to which not merely every philosophical enquirer, but every man who is interested about his eternal welfare, must be solicitous to receive a satisfactory answer, is, "How shall God be just and yet the justifier of the ungodly?" To this question the New Testament happily furnishes a most explicit reply. "For when we were yet without strength, in due time Christ died for the ungodly."* And how were the ungodly to avail themselves of the benefit resulting from the death of Christ? The scriptural reply is, "By faith." "By him (Jesus) all who believe are justified from all things, from which they could not be justified by the law of Moses." "Being justified freely by his grace through the redemption that is in Christ Jesus." "Man is justified by faith, without the works of the law."†

Such being the main tenor of the declarations in the New Testament, it is no wonder that the doctrine of justification by faith should in all ages have obtained a very general reception, or that infidels and others should in all ages have disputed it. "You tell sinners," says Celsus, "not to examine, but to believe; and their faith will save them;" which is just the language that it might be expected an uncandid opponent would adopt.

To decide, however, in this important enquiry, from the nature of things as revealed in Scripture, and not from any appeal to inferior authority, let us attend to three questions: What is meant by justification? What by faith? What is the genuine import of the term justification by faith?

I. With regard to justification; it manifestly in its primary sense has relation to accusation. Those who have committed no crime, or omitted no binding duty, are free from guilt, or reasonable charge of guilt; but may still require justification. If there be no accusation or charge brought against a person, he does not stand in need of being justified; but when he is accused of a crime of which he is

* Rom. v. 6. † Acts xiii. 39. Rom. iii. 24, 28. Tit. iii. 5.

entirely innocent, he thence has an opportunity of justifying himself by making his innocence appear : and his judge has thence an opportunity of justifying him by pronouncing or declaring publicly that he is innocent of the crimes laid to his charge. This is justification according to its original meaning ; but in this sense none can, strictly speaking, be justified, since all are sinners and all are accused ; for the law accuses, Satan accuses, and conscience accuses.

Against such accusers, retaining the primary interpretation of the word, "no flesh living can be justified." We must look, then, for some other acceptation of the term. And thus we find that by the phrase to justify is often meant so to do a man right, as to pronounce sentence in his favour, to acquit him from guilt, to excuse him from burden, to liberate him from punishment, and to repute or deem him just. Thus in one of these senses "wisdom" is said to be "justified of her children : " and thus justification, in a still more extended sense, is not opposed to accusation merely, but to condemnation. As in the observation of Solomon—"He that justifieth the wicked, and he that condemneth the just, even they both are an abomination to the Lord ;" and in the declaration of Jesus Christ, "By thy words thou shalt be justified, and by thy words thou shalt be condemned."

In the evangelical acceptation of the term, as it is applied by the Apostle Paul, justification is "of God," and imports his acquitting us from guilt, condemnation, and punishment, by free and full remission of our sins, reputeing and declaring us just persons, and dealing with us as though we were upright and innocent in his esteem. For this apostle treats of justification as an act of judgment performed by God, by which he declares his own righteousness and justice, and at the same time our liberation from the punishment due to transgression : his justice consisting in accepting a competent satisfaction offered in lieu of the debt due to him, and in reparation of the injury done to him, by reason of which the debtor is acquitted and the offence remitted.

II. In the next place, to ascertain what is the evangelical interpretation of the word faith, as it relates to justification let us remark,

1. That this faith is something more than simple belief, or that assent of the understanding, which neither affects the heart nor the conduct. For Paul speaks of "believing in the heart" as essential to salvation, because "with the heart man believeth to righteousness or justification."

2. This faith is something different from believing that

the Scriptures are the word of God, and that all things contained in them are true. For this, as Dr. Doddridge remarks, is liable to a double objection: as on the one hand it supposes it absolutely necessary that every man should believe both the plenary inspiration, and the extent of it to all the books of Scripture; which, though it may admit of strong proof, can never be shown to be a thing the belief of which is absolutely requisite to salvation: and on the other hand an implicit and entire belief in this may be yielded by a mind which is grossly ignorant of, or sadly misapplies, some of the most important doctrines of Christianity.

3. This faith does not necessarily imply a persuasion that God hath remitted our sins: for it relates to propositions revealed by God; and God has no where declared that he has remitted *our* sins individually. He has indeed declared that he will pardon our transgressions, and “blot out our iniquities,” if we cordially and sincerely comply with certain requisitions: but the ascertaining that we have so complied is matter of experience, and not of faith.

4. Much less is that a correct notion of faith which defines it to be “a firm and certain knowledge of God’s eternal good will towards us particularly, and that we shall be saved.” For according to this a man must possess a certain knowledge both of his present sincerity and sanctity, and of his perseverance: and, farther, if he be not sure he has repented and is converted, it would follow from this definition that he must be sure he is not converted, which would be truly perplexing and discouraging to most persons of genuine humility and lowliness of mind.

5. True faith implies acts of mind, acts of will, and subjection of conduct. It is called “faith in Christ,” and includes not merely belief in Christianity, belief in Jesus as the Messiah, but an entire resigning of our souls to him for salvation in his appointed way. It is also termed “faith in the name of Christ,” “faith in his blood,” “faith in his righteousness,”* implying an acknowledgement of worthlessness and insufficiency in ourselves, and a depending on what the Saviour has done and suffered, for our pardon and acceptance. It farther includes “coming to Christ” in the way of his commandments, and a firm and prevailing resolution of sincere obedience, manifesting itself in a “purified” heart, a “sanctified” conduct, and exalted attainments in “righteousness, even the righteousness which is of faith.”

* John 12. Rom. iii. 25. Col. i. 20. 2 Pet. i. 1.

Lastly, with respect to true faith, it may be remarked, that though good works are distinct from it, so distinct indeed that they are frequently opposed; though they do not give value to it, but it renders them acceptable; yet they always accompany it as its peculiar fruit and genuine effect; proceeding as naturally from it as water flows from a fountain, or light emanates from the sun. They are also the touchstone of faith, its evidence and measure. Faith itself is unseen, being seated in the heart: but holiness and good works bring it forth to public view, and make it tend to public benefit. Where there is much faith, much will be produced; where there is but little faith there will be proportionally little holiness; and where there is no faith, no "fruit" is to be expected. Hence hypocrites and men of spurious faith are described as "clouds without water, carried aside by winds; trees whose fruit withereth, barren, twice dead, plucked up by the roots."

III. Let us now proceed to enquire what is the evangelical interpretation of justification by faith. How according to the scheme developed in the Christian dispensation, is a man to obtain the blessing of justification, when he seeks it at first, or when through his frailty or unfaithfulness he needs a renewal of it? The correct answer, we apprehend, is, that he is to seek it with sole recourse to God in Christ through the medium of faith, and to look entirely off himself to the fountain of grace for mercy.

The inspired writers of the New Testament consider man as he really is, that is, both as guilty and depraved and they make us acquainted with the remedies God has graciously provided both for our guilt and our depravity. They assure us that on the exercise of a lively faith we are justified from former sins, and brought into a state of acceptance with God, by virtue of the atonement: "the blood of Christ cleanseth from all sin:" and to meet our wants in the second case, or as theological writers frequently designate it, "to preserve us in a state of justification," we are promised the aids of the Spirit to renew the heart, and effectually lead us on to the performance of duty; this also being promised as a consequence of true faith. "Being justified by faith we have peace with God; because the love of God is shed abroad in our hearts by the Holy Ghost, which is given unto us."*

Providence.

Although great confusion and uncertainty were evinced in the notions both of the vulgar and the philosophic ancient pagans, with regard to the unceasing superintending providence of one or more superior beings; yet there were but few among them that positively and constantly denied that doctrine in every sense. Several of them doubted it in some of their speculations; others fancied that the Deity by intermeddling with human concerns would degrade and pollute himself: but scarcely any of them ridiculed the notion, while some reasoned forcibly in favour of it, and derived from it consolation and delight.

How lamentable is the contrast between the sentiments of heathens on this topic, immersed, as they were in the grossest ignorance as to the fundamentals of religious truth, and those of the many who, though enjoying the full blaze of scientific and religious knowledge in a Christian country, ridicule this consoling doctrine. How strange, that while, conformably with the wise observation of Lord Bacon, "it is heaven upon earth to have a man's mind move in charity, rest in providence, and turn upon the poles of truth," there should be found men of ingenuity and literature, who dazzle by their talents and delude by their wit, that will boldly affirm "that the doctrine of the immediate and perpetual interference of divine providence is not true"—and insinuate that it is "ridiculous, degrading, and dangerous."

In opposition to the assertion just quoted, it will be no difficult matter to prove, that the doctrine of the particular, as well as that of the universal providence of God, is revealed clearly in Scripture, is confirmed by history, and is compatible with the established principles of philosophy.

David abounds with references to the providence of God. "The eyes of all wait upon thee, and thou givest them their meat in due season. Thou openest thine hand, and satisfiest the desire of every living thing. The Lord preserveth all them that love him; but all the wicked will he destroy." "The Lord preserveth the strangers; he relieveth the fatherless and the widow; but the way of the wicked he turneth upside down." "He prepareth rain for the earth, he maketh grass to grow upon the mountains. He giveth to the beast his food, and to the young ravens which cry."^{*}

* Psalm cxlv. 15, 16, 20. cxlv. 8, 9. cxlvii. 8, 9.

Again, the prophet Ezekiel, in one of his delightful parables, where he describes the security, prosperity, and universality of the Messiah's kingdom, under the metaphor of a flourishing "branch," concludes by a forcible declaration of the minuteness as well as the extent of God's providence, still keeping up his allusion.—"And all the trees of the field shall know that I, the Lord, have brought down the high tree, have exalted the low tree, have dried up the green tree, and have made the dry tree to flourish: I, the Lord, have spoken, and have done it."*

Since, then, the Divine Being "is the same yesterday, to-day, and for ever," "without variableness or shadow of turning,"† and since his providence was constantly and universally manifested in the times of Moses, Job, David, Daniel, and Ezekiel, it would be absurd to imagine that it should now or at any time, become dormant, or partially evinced. But we need not stop here. The proofs from the New Testament might be extracted from almost every page. A few of them only shall be adduced on the present occasion. For declarations of the extent and universality of providence read Matt. vi. 19—34. x. 29—31. Luke xii. 6, 7, 22—31. That all things are fixed under its conduct, is declared in Acts xvii. 26. Our entire dependence upon providence is taught in James iv. 13—17. And that it is most remarkably manifested in the care of good men, may be learnt from Acts xxiii. 17—25. xxv. 4, 21—27. xxvi. 21, 22, 32. That we owe every thing which is conducive to life and piety to God's providence, is taught by Peter, 2 Epist. i. 3: and by Paul in numerous places.

Indeed the connection established between piety and prayer, on which its growth depends, and the acknowledgement of a particular providence included in the performance of prayer, must with all considerate persons be decisive on this point.

The doctrine of a particular or special providence is, therefore, a doctrine of Scripture: and that it is confirmed by history is strikingly manifest. Thus the history of revealed religion is in truth the history of providence. Trace, for example, the stories of Joseph; of David, or of Jeroboam. Men usually assign no cause for the conveyance of Joseph into Egypt, but the envy of his brethren; for Shimei's reviling David, but his base malignity; for David's success against Goliath, but his skill in using the sling; for his numbering the people, but his ridiculous pride; for Jero-

* Ezek. xvii. 24. See also Prov. xvi. 33. Dan. v. 23. Deut. xxxii. 39; and 1 Sam. ii. 6, 7, 8, 9

† Heb. xiii. 8. James i. 17

Joab's revolt, but his unruly ambition. Yet, if we look beyond the surface, we shall find that these were foreseen, and, if we may so say, projected into their respective places for the most important purposes. Fix your attention for a moment upon the case of David. It was the intention of Providence "to place him upon the throne of the Hebrews." The country is invaded by a foreign enemy; the hostile armies meet, and lie encamped upon opposite mountains. A man comes forth from the army of the invaders, as was extremely common in those times, and defies the Hebrew host to send forth a champion to meet him in single combat. Terrified by the gigantic bulk and mighty force of Goliath, no man would risk the unequal conflict. David, who was too young to carry arms, had been sent to the camp with provisions for his brothers, and heard the challenge. In defence of his flock he had killed some beasts of prey in the wilderness, and he was an excellent marksman with the sling. He thought it might probably be as easy to kill a man as a wild-beast; at all events, he knew that a stone well directed would prove no less fatal to a giant than to a dwarf: he therefore resolved to try his skill, and he tried it with success. Here no man's free-will was interrupted, and no miracle was accomplished; yet by this train of circumstances thus brought together, a foundation was laid for the future fortunes of the son of Jesse, for the greatness of his country, and for accomplishing the purposes of Providence."

Observe, again, the chain of events which led to the birth of Christ, and to the place where he was born. They related to individuals who, in human reckoning, were among the most mean and ignoble; and yet upon these persons, their concerns, their journeyings, their tarryings, hung the destinies of thousands and tens of thousands in every age.

In like manner we may trace in civil history the dependence of momentous concerns upon mere trifles. The bare sight of a fig, shown in the Senate-House at Rome, occasioned the destruction of Carthage. The accidental finding of a dropped letter led to the detection and prevention of the gunpowder-plot. These and other apparent accidents are not the offspring of chance, but result from the silent operation of God's providence, which, says Dr. Barrow, "doth not hurry along like an impetuous, rumbling torrent; but glideth on as a smooth and still current, with an insensible but imperceptible force, carrying things down the stream without much ado, without any clatter, by a nod of his hand, by a whisper of his mouth, by a turn of his hand,

effect his purposes : winding up a close spring, he setteth the greatest wheels in motion ; and thrusting in an insensible spoke, he stoppeth the greatest wheels in their career ; injecting a thought, exciting a humour, presenting an occasion, introducing a petty accident, he bringeth about the most probable events.

This is all this in any respect incompatible with the received principles of natural philosophy, but perfectly consistent with them. For if we assume the hypothesis most favourable to the sentiments of those who deny the incessant operation of providence, and say that matter always existed, we shall not thence supersede the necessity of providential superintendence and control. (For, from many arguments made in the course of the last century, it is highly probable, nay, it is certain, that the particles which constitute even the most solid bodies, are not *all* in contact ; yet that a very considerable force is required to separate farther from each other the parts of a mass of wood, iron, or stone. Great force is also requisite to bring bodies, however small or highly polished, into *apparent* contact ; whence they must be kept asunder by some extraneous power. So that the cohesive force by which the molecules, or the minute particles of matter, are retained together, as well as the repulsive force by which they are kept at certain distances, demonstrate, with regard to every body in the universe, animate or inanimate, that the immediate and perpetual agency of something that is not matter, is necessary to preserve them in the state in which they now appear. So again, it has been shown that from all action of body upon body motion is impaired, and the quantity of it constantly decaying in the universe. Hence, since matter cannot re-excite the motion in itself, it follows that as an immaterial power first impressed motion on matter, so it still reproduces the motion lost, and makes up the decays sustained. Also, since the forms and motions of bodies sustained, and in all of them an end is thus pursued, a law obeyed, wise purposes designed and accomplished, the power which is constantly operating to effect all this must be combined with intelligence ; and what can be every where and at all times thus assisting power and intelligence, but God, either immediately or by his subordinate instruments ?

I taking this view of the doctrine before us we have not imputing mere speculation, but have traced a train of reasoning which is practical and highly moral in its tendency. Let the notion once fully occupy the

mind of a vicious man, that God is too exalted or too remote from us to watch the progress of individual guilt, to notice and record its propensities, to counteract its designs—an with what ardour will he run the career of iniquity. While on the other hand, the conviction that “all things are naked and open” to the piercing eye of God—that when transgressors say, “Surely the darkness shall cover us,” behold “even the night shall be light about them,” “the darkness and the light being both alike to God”—that no being is too insignificant or too obscure to escape the notice of God—that none can hide himself in gloom so thick as to be impenetrable to the glance of Omniscience—tends to appal the guilty, and check the luxuriant growth of crimes. In a world of trial, sin, and difficulty, what can be so comforting to the good as the firm persuasion that God is the God of individuals, and the “Father of the faithful,” the “refuge and strength” of all who trust in him; that he hears the cry of the suppliant, and, wherever it is needed, and duly estimated, “giveth power to the faint;”—that he, who when he promises will perform, has declared that “they who wait upon the Lord shall renew their strength; they shall mount up with wings as eagles: that they shall run and not be weary, shall walk and not faint!”†

The Resurrection of the Body.

If a being, which was constituted by the union of two substances essentially different, were appointed to continue, it must continue a mixed being, or it would be no longer the same being; so that if man is to exist in a future state, the doctrine of the resurrection of the body is a necessary consequence of his nature; those who admit the immortality of the soul, and deny the resurrection of the body, therefore forget the man, and, in effect, deprive him of existence beyond the grave. Still, it has been thought, by many persons in all ages, “a thing incredible that God should raise the dead;” and the contrary is nowhere positively asserted, but in the Scriptures received by Christians, or in writings founded upon them. There are many passages in the Old Testament, which either obscurely hint at the resurrection, or immediately refer to it; yet they are by no means such as produced a firm belief in the doctrine among the Jews. The Sadducees, for example, “say that there is

* Psalm cxxxix. 14, 2.

† 1st Cor. xiii. 12.

no resurrection, neither angel, nor spirits, but the Pharisees allow both."* And even among our Lord's disciples, though some of them, like Lazarus's sister Martha, believed that the dead would "rise again in the resurrection at the last day,"†

Brs doubted and "wondered what rising from the dead should mean."† When Paul preached to the philosophers at Athens, and declared to them the resurrection of Jesus, they were astonished at the novelty and singularity of his doctrine, and "said, He seemeth to be a setter forth of strange gods, because he preached unto them Jesus and the resurrection."||

This doctrine of the resurrection of the dead is, however, one of the great articles of the Christian faith. We believe that Jesus died and rose again; we also believe, for so we are taught in the New Testament, that "them which sleep in Jesus will God bring with him," that "Christ by his rising became the first-fruits of them that slept," that "the dead shall be raised incorruptible," that "the grave and the sea shall give up their dead," that, at this resurrection "the dead in Christ shall rise first," the Lord Jesus Christ will "change our vile body, and fashion it like unto his glorious body, according to the working of that mighty power whereby he is able to subdue all things to himself."§

Clearly as this doctrine is revealed in the above quoted and several other places of Scripture, it is, notwithstanding, doubted by many professing Christians. And it has been usually denied by infidels, and selected by them as one of the most vulnerable points in the system of Christianity. Yet, taking deists upon their own ground, the reasonableness, if not the necessity of the resurrection might be established; while, to those who allow the authenticity and correctness of the New Testament history, the matter will be placed beyond the reach of dispute.

We are assured by the great Head of the church, that "the hour is coming in which all that are in their graves shall hear his voice and come forth; they that have done good unto the resurrection of life, and they that have done evil unto the resurrection of damnation." At that great and solemn event, when we shall "all be changed in a moment, in the twinkling of an eye at the last trump," "the dead shall be raised incorruptible:"¶ and it is probable that the bodies of the righteous and the wicked, though each shall in some

* Matt. xxii. 23. Acts xv.

Acts xvii. 18.

Thess. iv. 14, 16. 1 Cor. xv. 20, 22. Rev. xiii. 14-15, 21.

4.

1 Cor. xv. 42

respects be the same as before, will each be in some respects not the same, each undergoing some change conformable to the character of the individual, and suited to his future state of existence; but both, as the passage just quoted clearly teaches, are then rendered indestructible. Regarding the good, it is said, "When Christ, who is our life, shall appear, we shall appear with him in glory," "we shall be like him, our body shall be fashioned like his glorious body;" yet, notwithstanding this, "it doth not yet fully appear what we shall be;" and that for a very obvious reason. Our present manner of knowing depends upon our present constitution, and we know not the exact relation which subsists between this constitution and the manner of being in a future world; we derive our ideas through the medium of the senses; the senses are necessarily conversant with terrestrial objects only; our language is suited to the communication of present ideas; and thus it follows that the objects of the future world may in some respects (whether few or many we cannot say) differ so extremely from terrestrial objects, that language cannot communicate to us any such ideas as would render those matters comprehensible. But language may suggest striking and pleasing analogies; and with such we are presented by the philosophic apostle. "All flesh," says he, "is not the same flesh; but there is one flesh of men, another of beasts, another of fishes, and another of birds;" and yet all these are fashioned out of the same kind of substance, mere inert matter till God gives it life and activity: "There are also celestial bodies, and bodies terrestrial; but the glory of the celestial is one, and that of the terrestrial is another. There is one glory of the sun, and another glory of the moon, and another glory of the stars: for one star differeth from another star in glory. So also is the resurrection of the dead. It is sown in corruption, it is raised in incorruption: it is sown in dishonour, it is raised in glory: it is sown in weakness, it is raised in power: it is sown an animal body, it is raised a spiritual body."† It is sown an animal body; a body which previously existed with all the organs, faculties, and propensities, requisite to procure, receive, and appropriate nutriment; as well as to perpetuate the species: but it shall be raised a spiritual body, freed from the drag of matter, freed from organs and senses required only in its former

probably possessing the remaining senses in greater perfection, together with new and more exquisite faculties, fitted for the exalted state of existence and enjoyment to which it is now rising. In the present state the organs and senses appointed to transmit the impressions of objects to the mind, have a manifest relation to the respective objects: the eye and seeing, for example, to light: the ear and hearing, to sound. In the refined and glorious state of existence to which good men are tending, where the objects which solicit attention will be infinitely more numerous, interesting, and delightful, may not the new organs, faculties, and senses, be proportionally refined, acute, susceptible, or penetrating? Human industry and invention have placed us in a manner in new worlds; what, then, may not a spiritual body, with sharpened faculties, and the grandest possible objects of contemplation, effect in the celestial regions to which Christians are invited? What delight would Archimedes have experienced, could he by the aid of a microscope have seen the fluids moving through the vessels of some of our minutest insects: or viewed with a telescope the belts of Jupiter, or the ring of Saturn? And how would that sink into insipidity when compared with the rapture with which a being, possessing a spiritual body, having its former senses perfected, and new ones communicated, shall explore all the glories and wonders which will be exhibited to it when it shall be admitted into heaven, and enabled to see God?

Here, clogged with animal bodies, and borne down to the earth by gravity as well as our propensities, we are soon tired of bodily exertion, our mental attention flags, and our affections, "cleaving to the dust," may impede the operations of both body and mind; but there, where the body will be liberated from the influence of gravitation (the causes of gravity being removed) motion may be free and without fatigue, the body may obey with astonishing facility the volitions of the soul, and transmit itself from place to place with the utmost celerity—there the senses will no longer degrade the affections, the imagination no longer corrupt the heart—the magnificent scenery thrown open to view will animate the attention, and a glow and vigour to the sentiments, that roused emotion will never tire, those glowing sentiments will never cloy; but the man now constituted of an indestructible body as well as of an immortal soul, may visit in eternal succession "the streets of the celestial city," and "drink of the pure river of water of

life, clear as crystal, proceeding out of the throne of God, and of the Lamb; and dwell for ever in those shadows of harmony and peace, which, though "eye hath not seen, nor ear heard; nor has it entered into the imagination of man to conceive," we are assured "God hath prepared for them that love him."

Eternal Existence after Death.

It is one of the grand peculiarities, as well as one of the great excellencies, of the New Testament, that it exhibits both promises and threatenings of eternal existence after natural death. These are presented to the contemplation of mankind under the character of reward and punishment; the existence of one implies the existence of the other: the belief of the latter is as necessary as the belief of the former; for, without it, the belief of a future state will have little if any influence on the bulk of mankind.

The ancient philosophers had some feeble glimmerings of a future state; but they were sadly clouded by error and absurdity; and the awful idea of accountability was in great measure if not entirely excluded. But "God hath brought life and immortality to light, through the gospel." Christians are taught that man has two states of existence, the one temporal, the other eternal: ineffable, interminable bliss is promised to those who are "faithful unto death;" while "indignation and wrath, tribulation and anguish," are represented as the eternal doom of "every soul of man that doeth evil," and repenteth not. The Scriptures also suggest to us a remarkable and essential distinction, not only in regard to the duration but to the nature of the states before and after death. Here the capacity of enjoyment and that of suffering appear to have nearly an invariable ratio: those who have the richest sources of delight seem to have most avenues of pain: every new road to knowledge gives them a fresh insight into their ignorance; and every refinement upon pleasure renders them more alive to distress: while those who are blunted against the finer feelings seem to an equal degree hardened against the pressure of evil; so that though they may enjoy less, they likewise suffer less: the happiness of this life is, probably, much more widely diffused (the stings of conscience not considered) than any observers might suppose. But this balancing of our woes will not be found beyond the grave. In the next world the capability of enjoyment will, to the

perpetually expanding, while that of suffering will be entirely destroyed: and, on the other hand, with those who are consigned to endless punishment, the capacity of suffering will, there is reason to fear, continually increase, while that of enjoyment will be blunted and annihilated; for "the wrath of God abideth on them."

We subjoin a few of the passages of Scripture, in which the nature and duration of the future state of existence are expressly declared. And first we shall quote part of the language of our Lord in his awful description of the solemnities of the judgment-day: "Then shall the King say unto them on his right hand, Come, ye blessed of my Father, inherit the kingdom prepared for you from the foundation of the world." "Then shall he say also to them on his left hand, Depart from me, ye cursed, into everlasting fire, prepared for the devil and his angels." "And these shall go away into everlasting punishment; but the righteous into life eternal."* In one of his prayers to his heavenly Father, the language of the Messiah was, "Father, I desire that those whom thou hast given me, may be with me where I am, to behold my glory."† In his celebrated sermon on the mount his language was, "Blessed are the pure in heart; for they shall see God."‡ And in the Revelations we have the promise, "To him that overcometh I will grant to sit upon my throne, even as I also overcame and sit with my Father on his throne."§ Hence, in other parts of the same inspired book it is said, "They are before the throne of God, and serve him day and night in his temple; and he that sitteth on the throne will dwell among them. They will hunger no more, nor will they thirst any more; nor will the sun light upon them, nor any heat. For the Lamb that is in the midst of the throne will feed them, and will lead them to living fountains of waters: and God shall wipe away all tears from their eyes." "And there shall be no more death, neither sorrow nor lamentation, neither shall there be any more pain; for the former things are passed away."§ Well may language labour to describe felicity such as this: there is nothing hyperbolic in calling it, as the apostle Paul

for thee to enter maimed into life, than, having two hands, to go into hell, into the unquenchable fire; where their worm dieth not, and the fire is not quenched. And if thy foot cause thee to offend, cut it off: it is better for thee to enter into life lame, than, having two feet, to be cast into hell, into the unquenchable fire; where their worm dieth not, and the fire is not quenched. And if thine eye cause thee to offend, pluck it out; it is better for thee to enter into the kingdom of God with one eye, than, having two eyes, to be cast into hell fire; where their worm dieth not, and the fire is not quenched. For every one shall be salted with fire." "The Lord Jesus shall be manifested from heaven, with his mighty angels, in flaming fire, taking vengeance on those that know not God, and that obey not the gospel of our Lord Jesus Christ: and these shall suffer punishment, even everlasting destruction from the presence of the Lord and from the glory of his power." "To these is reserved the blackness of darkness forever." "The smoke of their torment ascendeth for ever and ever; and they have no rest day nor night." "And the devil that deceived them, was cast into the lake of fire and brimstone, where the beast and the false prophet are, and shall be tormented day and night for ever and ever."*

Such, on the one hand, are the delightful, and on the other, the tremendous, declarations of Scripture. And while the blessing and the curse is set before us in such awful yet inspiring language, let us give diligence to make our calling and election sure: and by a patient continuance in well doing, seek for "glory, honour, and immortality," that we may finally enjoy "eternal life."

CHRISTIAN DUTIES.

LAO-TANTIUS, an ancient father of the church, in one of his appeals to the adversaries of true religion, drew a bold but not unfaithful picture of the genuine effects of the gospel upon the heart and conduct of sincere Christians:—"I tell me," says he, "a man who is choleric, abusive in his language, headstrong and unruly; and with a very few words (the words of God) he shall be rendered gentle as a lamb. I will make a greedy, avaricious, close-fisted man, and I will

scoutly return him to you a generous creature, freely bestowing his money by handfoul. Give me a cruel, blood-thirsty wretch, instantly his ferocity shall be transformed into a truly mild and merciful disposition. Give me an unjust man, a foolish man, a sinful man ; and on a sudden he shall become honest, wise, and virtuous. In one layer (the laver of regeneration) all his wickedness shall be washed away. So great is the efficacy of the divine wisdom, that when once admitted into the human heart, it expels folly, the parent of all vice ; and in accomplishing this great end, there is no occasion for any expense, no absolute need of books, or deep and long study or meditation. The benefit is conferred gratuitously, easily, expeditiously ; provided the ears and the heart thirst after wisdom. Did any, or could any of the heathen philosophers accomplish such important purposes as this ?”

This language of the Christian Cicero (as he was usually denominated) conveys no vain and empty boast ; nor does it, under pretence of exalting religion, insult and trample upon reason and philosophy. The effects here ascribed to religion have been frequently produced by it, and will always be produced when it is allowed its genuine and complete operation. And with respect to the supposed insult offered to reason, there can be no such thing, unless that be an insult to reason, which renders its real nature palpable, and guards against the abuse of it while it teaches its proper use. Reason has been termed, and not improperly, “ the eye of the soul :” for as the eye cannot see without light, so neither can reason know without instruction. The progress of mankind in learning and science has been made, strictly speaking, by groping, by feeling out one truth after another, and adding it to the general stock ; except, indeed, when some grand discoveries have been struck out once in a century, or perhaps less, by the force of genius ; but even these, whatever benefits may have resulted from them, have not been discoveries of truths or propositions, such as are developed in revealed religion. Reason can no more instruct itself, because it knows by instruction, than the eye can give light to itself, because it sees by the light. This observation applies peculiarly to religious matters ; and we may safely infer from it, that a man may as well take a lantern of things upon him in a dark night, by the light of his own eye, as pretend to discover the things of heaven in the night of nature, by the light of his own reason.”

The grand attributes of reason are, the capability of re-

ceiving, and when properly disciplined, of retaining whatever is communicated to it, and its power of discriminating, when it has suitable data, between truth and falsehood, or between fitness and want of fitness to accomplish certain purposes. And these attributes are possessed in the highest perfection, when, as Paul expresses it, "the eyes of our understanding being enlightend, we may know what is the hope of our calling, and what the riches of the glory of our inheritance in the saints, and what is the exceeding greatness of his power toward us who believe." Now, if these faculties of the soul be duly exercised, it will be seen that the religion of Jesus Christ is all it professes to be, and is capable of effecting all that its advocates ascribe to it; that it is conformable to the highest reason, and is therefore deserving of the warmest admiration and of the most cordial reception. The religion we are taught in the gospel leads inevitably to the exaltation and perfection of our noblest faculties: it requires us to use the things of this life as in reason they ought to be used, to cherish such tempers and dispositions as are the glory of intelligent creatures, to avoid such conduct as would degrade and debase our nature, to walk in such wisdom as exalts our character, to practise such piety as will raise us above the world and elevate us to God.

"His hand the good man fastens on the skies,
And bids earth roll, nor feels her idle whirl."

YOUNG.

If these be the genuine productions of religion, it is plain that they can never be too universally known and felt. Hence results the duty of promulgating religious knowledge to the widest extent; as well as that of bringing every action of life under the influence of religious principles; for if it be advantageous for one person to be wise, it is more so for all to be wise; and, if it be productive of profit and delight to an individual to be once wise, it is infinitely more so for him to be wise always. If it be commendable to avoid sin and folly to-day, it will be equally commendable so avoid them to-morrow, and to the end of life: if God ought to be worshipped and loved "with all the heart, and mind, and soul, and strength" now, he ought to be so worshipped and loved for ever: if the faithful discharge every personal and relative duty be required of us now, equally required of us always: if being pure and holy, and free from guile, if exercising ourselves to promote the happiness of our fellow-creatures and the glory of God, if

aspiring after communion with the Deity be productive of "joy and peace" to-day they will have a like tendency through life, and will assuredly issue in, indescribable unending felicity. So that, as he knows not truly what reason is, who does not always wish to live conformably to it: neither does he know the true use or nature of religion, who wishes to confine it to times, or seasons, or persons, or places. "He who thinks it grievous to live always in the spirit of religion, to have every part of his life full of it, would think it much more grievous to be as the angels of God in heaven."

There is a unity of design in the gift of the Christian religion, and there must, in like manner, be unity of design in the profession of it. Its immediate tendency is at once to promote the glory of God and the happiness of man; and its various doctrines, precepts, and promises all converge towards that grand point. Selfishness is, therefore, excluded; while happiness, individual as well as general, is necessarily predicated and ensured in the Christian system. Its promises allure the soul to heaven while they prompt the believer to benevolent and upright conduct: its doctrines expand and delight the intellectual faculties, while they furnish the strongest possible motives to virtue and holiness. Thus it happens that the Scriptures furnish a consistent and harmonious, though not a connected scheme of morality: for the scheme is harmonious, in so far as the same great purposes are always kept in view, and as it includes no contradictory or impossible injunctions; though its various precepts are scattered about, and not strictly connected, because one and another were delivered at distinct times to different persons, according to their respective circumstances and necessities.

Faith and practice constitute the whole of our religion; and none of the sacred writers is ever so exclusively occupied with one of these as to forget or neglect the other. Hence Christians are not merely exhorted to believe such and such propositions, but they are reminded that such belief to be beneficial must be influential, and they are exhorted to "let their conversation or conduct be as becometh the gospel," that they "may be blameless and harmless," the sons of God without rebuke, in the midst of a crooked and perverse generation, among whom they are to "shine as lights in the world."

In the gospel we have imparted to us the noblest and most exalted conceptions of the Supreme Being; and the various relations which he has been pleased to manifest

himself, as sustaining, in respect of his creatures and of his people, are amply revealed ; while the correspondent duties are urged upon us, and the most palpable and obvious directions given with regard to their extent and obligation. Thus we are commanded to "love the Lord our God, with all our heart, and soul, and mind, and strength ;" which is represented by our Saviour as "the first and greatest commandment ;" and from which all other duties emanate. We are told that we must be animated with a pure and ardent zeal for his glory, and must consider the pleasing and honouring him as infinitely preferable to the indulgence of any sensual inclinations. We are farther taught, that our love to God, if genuine, will be accompanied with a solemn and holy fear of his divine majesty ; indeed the terms are described as in a measure co-existent, neither operating to any great extent without the other. It is farther required of us to exercise trust in God ; implying faith, confidence in his wisdom and mercy, unreserved submission to his will, and resignation to all his dispensations ; and we are exhorted to live under a practical and habitual conviction of his essential presence with all, and of his spiritual presence with truly devout persons. A strict obedience to his righteous commands is most energetically enforced ; and this besides honour and worship in general, includes the diligent and faithful discharge of every personal and social duty. We are also urged to aspire after a conformity to God in all his imitable or communicable attributes ; to be "holy as he is holy, pure as he is pure, perfect as he is perfect," &c. and to this end we have set before us the spotless example of "the Captain of our salvation ;" being assured that we most resemble God, when the greatest "portion of the same mind" is in us "which was also in Christ Jesus." We are required to worship "God who is a Spirit, in spirit and in truth ;" deadness, dulness, and formality, both in prayer and praise are hence excluded ; and a remarkable simplicity and purity of worship is represented in the New Testament, as that which God will most approve. The rites therein prescribed are few in number, and highly excellent in their signification. The only sacraments enjoined upon us are "Baptism" and "the Supper of the Lord ;" both of which being positive institutions, should doubtless be observed with all possible regard to the circumstances exhibited in their primitive establishment.

It further appears, being indeed a necessary consequence of the Christian system, that we are required, in order to

worship God acceptably; to approach him through the appointed Mediator, by reason of whose intercession the prayers and praises of his sincere disciples are approved. Hence results another class of duties relating to "the Lord Jesus Christ," whom we are required to receive by faith; and whom we are taught to regard continually and habitually as our instructor, atonement, intercessor, guardian, example, &c. We are also exhorted to pray for the influences of God's Holy Spirit, and at all times so to conduct ourselves, as not to grieve or offend that Spirit, but rather to draw down a more copious communication of his influences.

But rules of moral duty, however, complete, precepts, however excellent, will be of comparatively little avail, unless they be enforced by suitable motives obvious to the understanding, and energetic in their operation. And here again the superiority of the religion of Jesus is equally evident. Good men are supported in the path of duty, and consoled under affliction by the enchanting prospect of "an eternal weight of glory;" bad men are persuaded to turn "from their evil courses" by having exhibited to them "the terrors of the Lord;" the delights of heaven, the unending anguish of hell; the blessed "society of the just made perfect," and that of "devils and damned spirits," are the awful alternatives placed before them. The example of him who, "though he was rich, yet for our sakes, became poor," and tabernacled amongst men, as well to shew them the way to glory, as to secure glory for them, stimulates powerfully to action: while the privileges of the gospel and the truly extraordinary means employed to entitle believers to those privileges, furnish in their turn admirable incentives to virtuous conduct.

Lastly, for our great encouragement, divine assistances are promised, to strengthen and preserve in the path of duty all who are duly aware of their own insufficiency, and humbly seek for guidance and protection where alone they are to be obtained.*

* The Editor has endeavoured in the foregoing pages to preserve, as much as possible, the language of the excellent work in which he has already acknowledged himself indebted (see page 690.) It is only necessary farther to state, that the foregoing observations on the Genuineness, Authenticity, and Inspiration of the Scriptures, are taken from Letters 5 and 10, in Vol. I.; and that those on the Principles and Doctrines of Christianity, &c. contain a very brief abstract of Vol. II. of Gregory's Letters; which, imperfect as it is, he hopes will yet be the means of directing the attention of the reader to the work itself.

PRINCIPAL RELIGIOUS DENOMINATIONS.

THE Christian world is divided into various denominations, each of which is discriminated by sentiments peculiar to itself. It would be impossible in this work to enumerate half of them, but it is desirable to give some account of those which are most conspicuous. But before we proceed to this, the Atheists and Deists should be just mentioned, and also a general outline given of Mahometanism, Judaism, and Christianity in general.

ATHEISTS.

The Atheist does not believe in the existence of a God. He attributes surrounding nature and all its astonishing phenomena to chance, or to a fortuitous concourse of atoms.

Archbishop Tillotson, speaking of atheism, says, "for some ages before the reformation, atheism was confined to Italy, and had its chief residence at Rome. All the mention that is of it in the history of those times, the papists themselves give us, in the lives of their own popes and cardinals, excepting two or three small philosophers that were retainers to that court. So that this atheistical humour amongst Christians was the spawn of the gross superstition and corrupt manners of the Romish church and court. And, indeed, nothing is more natural than for extremes in religion to beget one another, like the vibrations of a pendulum, which the more violently you swing it one way, the farther it will return the other. But in this last age atheism has travelled over the Alps and infected France; and now of late it hath crossed the seas and invaded our nation, and hath prevailed to amazement!"

DEISTS.

The Deists believe in a God, but reject a revelation from him. They are extravagant in their encomiums on natural religion, though they differ much respecting its nature, extent, obligation, and importance.

The term deist comes from the Latin word *Deus*, a God; and is applied to the rejectors of revelation, because the existence of a God is the principle article of their belief. The name was first assumed by a number of gentlemen in France and Italy, who were willing to cover their opposition to the Christian revelation by a more honourable name than that of atheists.

JUDAISM.

Judaism is the religion taught by God to the descendants of Abraham; a complete system of which is contained in the five books of Moses, their great lawgiver by divine appointment.

The principal sects among the Jews, in the time of Jesus Christ, were the *Pharisees*, who placed religion in external ceremony; the *Sadducees*, who were remarkable for their incredulity; and the *Essenes*, who were distinguished for their austere piety. It is scarcely necessary to add, that before the time of our Saviour the Jews believed in a future Messiah, but that now he is almost universally rejected by them.

MAHOMETANISM.

Mahometanism is the religion of Mahomet, who was born, in 541, at Mecca, a city of Arabia, and whose system is a compound of Paganism, Judaism, and Christianity: the Koran, the Mahometan's Bible, is held by them in great veneration. The principal doctrine of Mahometanism is the *Unity of God*, but the whole of its tenets form a compound of absurdity; yet so adapted to the varying opinions and habits of Jews, Christians, and Pagans, that it soon spread over the greater part of the eastern world; and indeed the converts that could not be gained by persuasive arguments or promised indulgences, were compelled by the sword to become proselytes to this military apostle.

CHRISTIANITY.

Christianity, in the general sense or common acceptance of the word, signifies a true belief in Christ and his doctrine, in opposition to idolatry and paganism. But it more strictly implies, not only a bare belief in Christ, but a constant perseverance in all good works and an abhorrence of, and

abstaining from, every thing that is evil, according to the doctrine and examples which both he and his apostles taught and practised, and which are so evidently set forth to us in the holy Scriptures. He who does this is a Christian indeed, without paying any regard to the doctrines and ceremonies of any particular national church, sect, or people; the manner of worship being only the mode of religion, but not religion itself: for all Christians, of all persuasions whatever, acknowledge that there is but one way of worshipping God—that is, in spirit and in truth.

Church of Rome.

The following are the principal tenets of the church of Rome:—

1. That Jesus Christ is one of the persons of the most holy Trinity; that he came from heaven, took our nature upon him, and suffered death upon the cross.

2. That before he ascended to heaven, he invested the apostle Peter with the power of infallibility, and gave him the keys of heaven and hell, with a full power of remitting or retaining the sins of men.

3. That in the year of Christ 42, the apostle Peter went to Rome, and governed the church there as supreme bishop above 24 years, and was at last crucified with his head downwards.

4. The Roman Catholics formerly believed, that the same power and authority which was vested in the apostle Peter descended to every succeeding bishop or pope of Rome, by an uninterrupted succession; who was considered as God's vicegerent, and supreme head of all nations, and of every nominal church on earth; having power to create or set up kings, and to depose them, to ordain bishops and priests, and excommunicate them at pleasure: but within these few years the power of the pope has much decreased, and the most considerate of the Roman Catholics deny his supreme authority altogether.

5. They believe in a purgatory, or place of fire, to purify the souls of the departed; and that the priests, by offering up or saying mass, can deliver their souls from this state of prison and misery, and transfer them into joy.

6. They believe that Jesus Christ, after he was crucified, descended personally into hell, and released from thence the souls of the former saints.

7. They assert that the blessed Virgin Mary is the mother

of God, and that she atones for the souls of them that adore and worship her on earth; therefore her picture, with the pictures of other saints, ought to be held in great respect and veneration.

8. They believe in the efficacy of works of supererogation.

9. They believe there are seven sacraments, namely, Baptism, Confirmation, the Eucharist, Penance, 'Extreme Unction, Orders, and Marriage.

10. They forbid the eating of flesh in the time of Lent, and on certain fast days; but notwithstanding their strict orders of abstinence and fasting, some will eat fish and other things.

11. They believe in the doctrine of transubstantiation; that is, after the priest has blessed or consecrated the bread and wine in the sacrament, the symbols or elements are no more bread and wine, but really the very body and blood of our Lord Jesus Christ.

Roman Catholics in all ages have been very zealous in the cause of their religion, making it a heinous sin in all such as will not adhere most strictly to their dictates. Many ridiculous superstitions have been continually imposed by them upon the consciences and persons of men in all nations; which occasioned a large body of people to dissent, separate from, and protest against popery, or the Romish church, who are therefore called Protestants, be they of what sect or denomination they may; and the church of Rome, without distinction, calls all such Protestants heretics, and they all partake of her anathemas.

The church of Rome has lost ground, and has been sinking in its power, ever since the glorious Reformation under Martin Luther, in the reign of Henry VIII. in the year 1517: but in the present age it more particularly seems to have received its death-blow.

Church of England.

This is the religion and worship of the people of England, as by law established: it is governed by two archbishops, besides bishops and inferior clergy, of whom the king is supreme.

The principles of this church are very particularly expressed in the thirty-nine articles, printed and published in the Book of Common Prayer, or forms and ceremonies of worship.

The following is a summary of its principles and of worship:

1. The church of England has thirty-nine articles, of which some contain the matter of faith relating to the church of God, and others are civil articles, relating to its government, order, and discipline.

2. The 1st, 2nd, 3rd, 4th, and 5th articles declare, that there is but one living and true God: that in the Godhead there are three persons, Father, Son, and Holy Ghost, all equal in power, majesty, and glory; that the second person in this Trinity took our nature upon him, and is both God and Man united in one Christ; that he was crucified for us in the flesh, was buried, rose the third day from the dead, according to the Scriptures; that he ascended into heaven, and there makes continual intercession for us.

3. They own (in article 9) original sin, and that by Adam's first disobedience, or transgression, all mankind are tainted or infected with evil, have a natural inclination to sin, and therefore are obnoxious to the wrath of God: and (in article 10) that man's condition since the fall is such, that he has no power, or free-will of himself, to do good works, acceptable to God, without the grace of God working with him.

4. The 11th article affirms, that we are justified by faith only, and are accounted righteous before God, for or through the merits of Christ only; but the 12th recommends the practice of good works, as the only proof of a true faith.

5. This church teaches us, in article 13, that works done before justification, or before grace is given, cannot be pleasing to God, nor do such works make us meet to receive grace, as they spring not from a true and lively faith: and the 14th flatly denies the works of supererogation, and acknowledges, that when we have done all we can possibly do, we are still unprofitable servants.

6. The 17th article treats of the doctrine of election and predestination.

7. The 18th article says, that the church holds all persons accursed who will presume to say that any man is saved by the law, or by any sect, profession, or persuasion: and the 22nd denies the Romish doctrine of purgatory, paying adoration to angels, and relics of saints.

8. The 27th and 28th articles acknowledge two sacraments only, namely, Baptism and the Lord's Supper, and after consecration the bread and wine are unchanged; both are to be received by the faithful only, in commemoration of the body and blood of Christ, broken and spilt upon the cross.

9. The church holds infant baptism, requires godfathers and godmothers, and marks the child in the forehead with the sign of the cross by the finger at the font.

These are the articles relating principally, though not wholly, to the tenets of the church of England : the other articles contain only rules and orders concerning its government and discipline.

The church of England worships God, first, by confession of sins, then calling upon his name in prayer, praises, and singing of Psalms. The Collects are short prayers used by the minister and people, and are allowed to be well suited to almost all occasions ; and the whole way and manner of worship is regularly and explicitly laid down in the Book of Common Prayer.

As the Romish church calls all people heretics who separate from her communion, so the church of England calls all those who separate from her communion schismatics.

As the Protestants separated from the doctrines of the church of Rome, on account of its errors and superstitions, so a certain set of men (formerly called Puritans) separated from this church, under the notion that several of its forms and ceremonies were unwarrantable, and that their conscience could not bear them.

All other sects who profess Protestantism in England, but dissent from the established church, are called Dissenters.

The Dissenters are divided into many sects, the principal of which are Presbyterians, Independents, Baptists, Methodists, Quakers, Arians, Socinians, &c.

Presbyterians.

Presbyterians are those persons who deny episcopacy, or the government of the visible church by bishops ; or those who assert that the church should be governed by elders or presbyters.

They elect their ministers by making choice out of several persons, whom the elders first examine in principles and abilities ; and when they have fixed upon a pastor, teacher, or minister, they nominate, or ordain him, by fasting, prayer, and imposition of hands.

All common affairs in every particular church or assembly are regulated by their ministers and elders. If questions arise which require more judgment to determine, they appeal to the ministers and elders of other congregations. They have yet a higher appeal than this ;

differences and disputes, they call a court or synod of the most able among them, who meet to regulate all affairs, and to adjust every dispute to the satisfaction of inferior congregations.

Their tenets concerning God, the Trinity, the sufferings of Christ, &c. are nearly the same as those of the church of England; and they baptize infants by sprinkling, and have sponsors for them as that church has, but refuse the names of godfather and godmother.

Some presbyterian churches have a regular form of prayer, but for the most part they worship by extempore prayer, preaching, and singing Psalms. The churches in Scotland are chiefly presbyterian, but there are many others of the same faith and order throughout England.

Independents.

The Independents, or Congregationalists, deny not only the subordination of the clergy, but also all dependency on other assemblies. Every congregation (say they) has in itself what is necessary for its own government, and is not subject to other churches or to their deputies. Thus this independency of one church with respect to another has given rise to the appellation Independents; though this mode of church government is adopted by the dissenters in general. The Independents have been improperly confounded with the Brownists, for notwithstanding they may have originally sprung from them, they excel them in the moderation of their sentiments, and in the order of their discipline. The first independent or congregational church in England, was established by a Mr. Jacob, in the year 1616; though a Mr. Robinson appears to have been the founder of this sect.

Baptists.

The Baptists are divided into *general* who are in sentiment Arminians; and into *particular*, who are Calvinists. Both however oppose the baptism of infants; say it is unscriptural, and that none are proper objects of this first sacrament but adult persons, and such as are capable of giving account of their faith in Christ Jesus, and believe an ordinance that he enjoined all his disciples. They say further, that sprinkling with water is not baptism, but an innovation, contrary to the rules of Scripture; and that therefore no person is truly baptized who is not dipped

into or buried under water, in the name of the Father, Son, and Holy Ghost.

Their manner of worship is by extempore prayer, praises, preaching, and singing Psalms : and their government or discipline is like the Independents, by elders or deacons, elected from their own particular community.

Methodists.

This term was formerly applied, in France and other countries, to certain polemic doctors, for their peculiar method of defending popery against the protestants ; but what we now understand by it, is the sect founded about the year 1729 by Messrs. John and Charles Wesley, with whom, in 1735, was associated the celebrated Mr. Whitfield. However, in 1741, a separation took place ; Mr. Wesley not holding the doctrine of predestination, which Mr. Whitfield and his friends supported : since which time this term has been assumed almost exclusively by the followers of Mr. Wesley. The principles of the Methodists approach nearer to Arminianism than those of any other sect.

Quakers.

They are so called, because at first, when they spoke or preached, they had violent shakings or agitations. Their first leader was one George Fox, in the year 1650, who taught that the light within is more sufficient to guide men to heaven than the holy Scriptures ; but they are now much reformed, and pay a great regard to God's word, but still deny the two sacraments, and all manner of ceremonies. They refuse to take an oath before a magistrate, and therefore are indulged to give their affirmation when called upon as witnesses. Their worship is very abrupt, any person rising up to pray or preach according as he is moved. They pray and then preach, or instruct their congregations, in all moral duties, and speak continually against the modes, vanities, and vices of the age. They are very plain and simple in their dress ; and for order and discipline in governing their different assemblies and congregations, and for unity, harmony, and brotherly love, they equal any Christian people or church in the universe.

Arians.

Arians are the followers of Arius, who in the time of Constantine the Great, A. D. 315, taught that the Son of God is not equal or consubstantial with the Father, but only the first of all created beings. His opinion was condemned as heretical by the council of Nice, A. D. 325; but notwithstanding this many of the eastern churches adopted his principles, and are very numerous to this day.

Socinians.

Socinians are those who follow the doctrine of one Faustus Socinus, who lived in the sixteenth century, and who taught that Jesus Christ was not only a mere man, but had no existence before the Virgin Mary. Modern Socinians have assumed the title of Unitarians, because they profess to be the only sect who believe in one God.

But there are some other sects the names of which are now found attached, in the present day, to any particular church, though their sentiments are to be found in some or other of the sects already mentioned; the chief of these are Arminians, Calvinists, and Antinomians.

Arminians

Arminians are those who adhere to the doctrine of Arminius, who separated himself from the Calvinists in the sixteenth century, and taught that predestination is grounded on foreseen works of righteousness; that a man has power of himself to embrace or reject the motions of the Holy Spirit, and that he may finally fall from grace after justification.

The Arminians of the present day are to be found partly in the church of England, partly among the presbyterians, but chiefly among the followers of Mr. Wesley.

Calvinists.

Calvinists are the followers of the noted reformer Calvin, who lived in the fifteenth century. He taught that predestination is absolute and unconditional from all eternity, and that God elected certain persons before the foundation of the world to eternal salvation and holiness of life.

The Calvinists of the present day are to be found chiefly among the followers of Mr. Whitfield, the Baptists, and the Independents.

Antinomians.

The name of Antinomian is derived from two Greek words, *anti*, against, and *nomos*, the law ; their favourite tenet being, that the law is not a rule of life to believers. It is not easy to ascertain what they mean by this position ; but they seem to carry the doctrine of the imputed righteousness of Christ, and of salvation by faith without works, to such lengths as to injure, if not wholly destroy the obligation to moral obedience. Antinomianism may be traced to the period of the reformation, and its promulgator was John Agricola, originally a disciple of Luther. The papists, in their disputes with the protestants of that day, carried the merit of good works to an extravagant length ; and this induced some of their opponents to run into the opposite extreme.

The term Antinomian has been frequently fixed on persons by way of reproach ; and therefore many who have been branded with this name have repelled the charge. There are many Antinomians, indeed, of a singular cast in Germany, and other parts of the continent ; they condemn the moral law as a rule of life, and yet profess a strict regard for the interests of practical religion. Speculative sentiments of any kind ought not to be carried to a degree which might endanger even in appearance the sacred cause of morality.

It is impossible to trace the various shades or degrees of Antinomianism in the present day, but it is to be found in its greatest extent among the followers of the late William Huntingdon.

THE
YOUNG MAN'S COMPANION;
•
OR,
YOUTH'S INSTRUCTOR.

PART XI.
AMUSEMENTS AND RECREATIONS.

AMUSEMENTS & RECREATIONS.

IT must be confessed that there appears a great and sudden transition from the subjects which have occupied our attention in the preceding pages, to those on which we are now about to enter. But this will be accounted for if we consider that we are compound beings ; and as we are made up of body and soul, or the animal and the spiritual nature, so must we have employments and pleasures which are, at times, suited to each.

The grand object to be pursued in our reception of the bounties of providence is to see that we are not led astray by the delights of sense, and that the sources of enjoyment which we have in common with the "beasts that perish," do not destroy the great end of our being, or make us forget that the immortal mind was formed for the contemplation of objects suited to its nature and original construction : in short, to borrow the comparison of the celebrated Dr. Young, our object should be, that we do not become *centaurs*, nor suffer the brute to run away with the man.

"The religious man," says this excellent writer, "has his amusements as well as the men of pleasure, but not such as deaden, but revive : such as recover the relaxed tone of application, reanimate to new efforts, and thus are essential, though pausing, parts of noble well judging industry. He, as well as they, has his parks, gardens, grottoes, cascades, statues, paintings, &c. but enjoys them more. Not because his are better than theirs, but because he is better than they. His paintings have beauties unborrowed from the pencil : and his statues in his eyes appear, like Pygmalion's, to live ; though mere marble in theirs. His all animating joy within gives grace to art, and smiles to nature,

invisible to common eyes. Objects of sense and imagination, for their greater power of pleasing, are indebted to the goodness of his heart. For as the sun is itself the most glorious of objects, and makes all others shine, so virtue itself is the greatest of pleasures, and of all other pleasures redoubles the delight."

The wisest of men has said, "Go thy way, eat thy bread, and drink thy wine with a merry (a cheerful) heart," for behold now God hath accepted thy work:" and could we hope that the sentiments and feelings of a religious nature which have been recommended in the preceding pages had not been entirely in vain, it would be indeed a delightful task to make a practical comment on this text, and say to every youthful heart which beats high with that desire of felicity which is common to us all, "Seek first those principles and feelings which we have endeavoured to describe, then receive the blessings of Providence with gratitude, and enjoy them with moderation; recollecting that religion, so far from destroying our relish for the rational amusements and recreations of life, where it is really possessed, adds the truest relish to them all."

As all creatures both animate and inanimate were designed to contribute to the necessities and enjoyments of mankind, we shall endeavour to point out the means by which this can be effected, with regard to some few of them, though from the nature of the work it can be but in a brief and imperfect manner.

HORSEMANSHIP.

AMONG the animals which are constantly employed in the service of man, there is none that contributes so largely either to his wants or pleasures as the horse. But although there is in this country an almost universal fondness for horses and the exercise of riding, yet but few, comparatively, are tolerable horsemen. The complaints we hear of horses being ungovernable, or performing ill, generally arise from the unskillfulness of their riders. The case is, we want a just taste in riding. No man learns it as an art. If a young man can ride a fox-chase or a horse-race, he immediately considers himself, and is considered by others, as a good horseman. If he has a horse which he cannot manage, he will tell you he designs to tame him by hunting: that is, if he can but get him to go forward, he will tire him. But

what end does this answer? By a week's rest the horse becomes as ungovernable as ever; and surely, if a man cannot manage his horse in full spirits, he cannot well be said to manage him at all.

Riding in the manage, or at the riding-school, is indeed considered as an art; and there we have professed masters to teach it. But it is looked on as of use to military people only, or to those in whom a shewy appearance is made proper and becoming by their rank in life. It is supposed, also, that all managed horses are taught motions for parade only; and that their paces are spoiled for the road and hunting. Hence, riding in the manage is called riding the great horse; and the common opinion is, that nothing of this art can be applied to general use. Almost every one thinks practice alone will teach to ride; yet, if artificial measures of motion, and the imitation of a good carriage, will mend even our manner of walking, which nature has taught, and constant practice improved, why should riding, which certainly is still more an art, be supposed to be easily and sufficiently attained, without any assistance? Does not daily experience proclaim the contrary? Do we not see many men, who make a good figure while they stand on their legs, appear, on horseback, helpless and awkward? The rowing a wherry seems to be what every one might acquire without difficulty; yet they who are instructed by rule row better than those who have had no instruction.

Notwithstanding this general opinion of the manage, there are some who think it teaches a horse nothing which will spoil his paces, and that he is greatly benefited by it, as he is there put under such a discipline as accustoms him to have no will of his own; by which means the management of him is made easy to an indifferent rider.

Were horses usually broken in thus far only in the manage, gentlemen might, without great difficulty, be taught all that is necessary to ride with safety, ease, and pleasure, and to make their horses perform cheerfully.

To this end, there should be masters to teach the art of riding on the hunting or common saddle; or, the inexperienced horsemen should practise a while at the riding house, with a view to get a few general principles, which he may afterwards apply to another manner of riding. Till this is done, such instruction may be given to bad horsemen by rule as may enable them to ride more safely and better than they do at present; not knowing that they have any thing to learn. This, in some degree, is attempted here.

Books in which the art of riding has been fully and completely taught, have not been calculated for so inferior a part of a horseman's education. What is said here is not, therefore, designed for those who ride well, but for those only who are liable to difficulties and accidents for want of common cautions, and who know not that, by leaving a horse at some liberty, and avoiding to give him pain by a bad management of the bridle, he will go better and more quietly than under a bad horseman, who lays all the weight of his arms on his horse's mouth, and by sitting awkwardly, not only becomes an uneasy burden to himself and his horse but rides in continual danger of a fall.

In the first place, every horse should be accustomed to stand still when he is mounted. One would imagine this might be readily granted; yet we see how much the contrary is practised. When a gentleman mounts at a livery stable, the groom takes the horse by the bit, which he bends tight round his under jaw: the horse, striving to go on, is forced back; advancing again he frets, as he is again stopped short, and hurt by the manner of holding him. The rider, in the mean time, mounting without the bridle, or at least holding it but slightly, is helped to it by the groom, who being thoroughly employed with the horse's fluttering, has at the same time both bridle and stirrup to give. Would not this confusion be prevented, if every horse were taught to stand still when he is mounted? Forbid your groom, therefore, when he rides your horse to water, to throw himself over him from a horse-block, and kick him with his leg, even before he is fairly upon him. This wrong manner of mounting is what chiefly teaches your horse the vicious habit against which we are here warning. On the other hand, a constant practice of mounting in the proper manner is all that is necessary to prevent a horse's going on till the rider is quite adjusted on the saddle.

The next thing necessary therefore is, that the rider should mount properly. The common method is to stand near the croup, or hinder part of the horse, with the bridle held very long in the right hand. By this manner of holding the bridle before you mount, you are liable to be kicked; and when you are mounted, your horse may go on for some time, or play what gambols he pleases, before the rein is short enough in your hand to prevent him. It is common, likewise, for an awkward rider as soon as his foot is in the stirrup, to throw himself with all his force to gain his seat; which he cannot do till he has first overbalanced himself on

one side or the other : he will then wriggle into it by degrees. The way to mount with ease and safety is, to stand rather before than behind the stirrup. In this posture, take the bridle and the mane together in your left hand, helping yourself to the stirrup with the right, so that your toe may not touch the horse in mounting. When your left foot is in the stirrup, move on your right till you face the side of the horse, looking across over the saddle. Then with your right hand, grasp the hinder part of the saddle, and with that and your left, which holds the mane and bridle, lift yourself upright on your left foot. Remain thus a mere instant on your stirrup, only so as to divide the action into two motions. While you are in this posture, you have a sure hold with both hands, and are at liberty, either to get safely down, or to throw your leg over, and gain your seat. By this deliberate motion, likewise, you avoid what every good horseman would endeavour to avoid—putting your horse into a flutter.

When you dismount, hold the bridle and mane together in your left hand, as when you mounted ; put your right hand on the pommel of the saddle to raise yourself ; throw your leg back over the horse, grasp the hinder part of the saddle with your right hand, remain a moment on your stirrup, and, in every respect, dismount as you mounted : only what was your first motion when you mounted becomes the last in dismounting. Remember not to bend your right knee in dismounting, lest your spur should rub against the horse.

It may be next recommended to hold your bridle at a convenient length. Sit square, and let not the purchase of the bridle pull forward your shoulder ; but keep your body even, as it would be if each hand held a rein. Hold your reins with the whole grasp of your hand, dividing them with your little finger. Let your hand be perpendicular : your thumb will then be uppermost, and placed on the bridle. Bend your wrist a little outward ; and, when you pull the bridle, raise your hand toward your breast, and the lower part of the palm rather more than the upper. Let the bridle be at such a length in your hand as that, if the horse should stumble, you may be able to raise his head, and support it by the strength of your arms and the weight of your body thrown backward. If you hold the rein too long, you are subject to fall backward as your horse rises.

If, knowing your horse perfectly well, you think a tight rein unnecessary, advance your arm a little (but not your

shoulder) towards the horse's head, and keep your usual length of rein. By this means you have a check upon your horse while you indulge him.

If you ride with a curb, make it a rule to hook on the chain yourself. The most quiet horse may bring his rider into danger, should the curb hurt him. If in fixing the curb you turn the chain to the right, the links will unfold themselves, and then oppose a farther turning. Put on the chain loose enough to hang down on the horse's under lip, so that it may not rise and press his jaw, till the reins of the bridle are moderately pulled.

If your horse has been used to stand still when he is mounted, there will be no occasion for a groom to hold him; but if he does, suffer him not to touch the reins, but that part of the bridle which comes down the cheek of the horse. He cannot, then, interfere with the management of the reins, which belongs to the rider only; and holding a horse by the curb (which is ever painful to him) is evidently improper when he is to stand still.

Another thing to be remembered is, not to ride with your arms and elbows as high as your shoulders, or let them shake up and down with the motion of the horse. The posture is unbecoming, and the weight of the arms (and of the body too, if the rider does not sit still) acts in continual jerks on the jaw of the horse, which must give him pain and make him unquiet, if he has a tender mouth, or any spirit.

Bad riders wonder why horses are gentle as soon as they are mounted by skilful ones, though their skill seems unemployed. The reason is, the horse goes at his ease, yet finds all his motions watched; which he has sagacity enough to discover. Such a rider hides his whip, if he finds his horse is afraid of it; and keeps his legs from his sides, if he finds he dreads the spur.

Avoid the ungraceful custom of letting your legs shake against the sides of the horse; and as you are not to keep your arms and elbows high and in motion, so you are not to rivet them to your sides, but let them fall easily. One may, at a distance, distinguish a genteel horseman from an awkward one: the first sits still, and appears of a piece with his horse; the latter seems flying off at all points.

It is often said with emphasis, that such an one has no seat on horseback; and it means not only that he does not ride well, but that he does not sit on the right part of the horse. To have a good seat is to sit on that part of the horse which, as he springs, is the centre of motion; and

from which, of course, any weight would be with most difficulty shaken. As in the rising and falling of a board placed in equilibrio the centre will always be most at rest, the true seat will be found in that part of your saddle into which your body would naturally slide, if you rode without stirrups; and is only to be preserved by a proper poise of the body, though the generality of riders imagine it is to be done by the grasp of the thighs and knees. The rider should consider himself as united to his horse in this point, and, when shaken from it, endeavour to restore the balance.

Perhaps the mention of the two extremes of a bad seat may help to describe the true one. The one is, when the rider sits very far back on the saddle, so that his weight presses the loins of the horse; the other, when his body hangs forward over the pommel of the saddle. The first may be seen practised by grooms, when they ride with their stirrups affectedly short; the latter by fearful horsemen on the least flutter of the horse.

To have a good seat yourself, your saddle must sit well. To fix a precise rule might be difficult: it may be a direction, to have your saddle press as nearly as possible on that part which we have described as the point of union between the man and horse; however, so as not to obstruct the motion of the horse's shoulders. Place yourself in the middle or lowest part of it: sit erect; but with as little constraint as in your ordinary sitting. The ease of action marks the gentleman. You may repose yourself, but not lounge. The set and studied erectness, acquired in the riding-house by those whose deportment is not easy, appears ungenteel and unnatural.

If your horse stops short, or endeavours by rising and kicking to unseat you, bend not your body forward, as many do in those circumstances. That motion throws the breach backward, and you off your fork or twist, and out of your seat; whereas the advancing the lower part of your body and bending back the upper part and shoulders, is the method both to keep your seat, and to recover it when lost. The bending your body back, and that in a great degree, is the greatest security in flying leaps; it is a security to when your horse leaps standing. The horse's rising does not try the rider's seat; the lash of his hind legs is what ought chiefly to be guarded against, and is best done by the body's being greatly inclined back. Stiffen not your legs or thighs; and let your body be pliable in the loins, like the coachman's on his box. This loose manner of sitting

The Young Man's Companion ;

will elude every rough motion of the horse ; whereas the fixture of the knees, so commonly laid a stress on, will in great shocks conduce to the violence of the fall.

Stretch not out your legs before you ; this will push you against the back of the saddle ; neither gather up your knees like a man riding on a pack ; this throws your thighs upwards. Each practice unseats you. Keep your legs straight down : and sit not on the most fleshy part of the thighs, but turn them inwards, so as to bring in your knees and toes ; and it is more safe to ride with the ball of the foot pressing on the stirrup, than with the stirrup as far back as the heel ; for the pressure of the heel being in that case behind the stirrup, keeps the thighs down.

Let your seat determine the length of your stirrups, rather than the stirrups your seat. If more precision be requisite, let your stirrups (in the hunting saddle) be of such a length as that, when you stand in them, there may be the breadth of four fingers between your seat and the saddle.

When your horse attempts to be vicious, take each rein separately, one in each hand ; and, advancing your arms forward, hold him very short ! in this case it is common for the rider to pull him hard, with his arms low ; but the horse by this means having his head low too ; has it more in his power to throw out his heels : whereas, if his head be raised very high, and his nose thrown out a little, which is consequent, he can neither rise before nor behind ; because he can give himself neither of those motions without having his head at liberty. A plank placed in equilibrio cannot rise at one end, unless it sinks at the other.

If your horse is headstrong, pull not with one continued pull, but stop, and back him often, just shaking the reins, and making little repeated pulls till he obeys. Horses are so accustomed to bear on the bit when they go forward, that they are discouraged if the rider will not let them do so.

If a horse is loose-necked, he will throw up his head at a continued pull ; in which situation the rider, seeing the front of his face, can have no power over him. When your horse does thus, drop your hand and give the bridle play, and he will of course drop his head again into its proper place : while it is coming down, make a second gentle pull, and you will find his mouth. With a little practice this is done almost instantaneously ; and this method will stop, in the distance of a few yards, a horse which will run away with those who pull at him with all their might. Almost every one must have observed that when a horse feels his

pulled with the bridle, even when he is going gently, he often mistakes what was designed to stop him as a direction to bear on the bit, and to go faster.

Keep your horse's head high, that he may raise his neck and crest. Play a little with the rein, and move the bit in his mouth, that he may not press on it in one constant and continued manner. Be not afraid of raising his head too high; he will naturally be too ready to bring it down, and tire your arms with its weight, on the least abatement of his mettle. When you feel him heavy, stop him and make him go back a few paces. Thus you break by degrees his propensity to press on his bridle.

It is a common custom to be always pulling at the bridle, as if to set off to advantage either the spirit of the horse, or the skill of the rider. Our horses, therefore, are taught to hold the head low, and pull so as to bear up the rider from the saddle, standing in the stirrups, even in the gentlest gallop. How very improper this is we are experimentally convinced, when we happen to meet with a horse which gallops otherwise. We immediately say, he goes excellently, and find the ease and pleasure of his motion. When horses are designed for the race, and swiftness is the only thing considered, the method may be a good one.

It is not to be wondered that dealers are always pulling at their horses, that they have the spur constantly in their sides, and are, at the same time, continually checking the rein. By this means they make them bound and champ the bit, while their rage has the appearance of spirit. These people ride with their arms spread, and very low on the shoulders of their horses. This method makes them stretch their necks, and gives a better appearance to their forehands. It conceals also a thick jaw, which, if the head were up, would prevent its yielding to the bit. It hides, likewise, the ewe neck, which would otherwise shew itself. Indeed, if you have a horse unsteadily to the bit, formed with a naturally heavy head, or one which carries his nose obstinately in the air you must find his mouth where you can, and make the best of him.

Many horses are taught to start, by whipping them for starting. How is it possible they can know it is designed as a punishment? In the riding-house, you teach your horse to rise up before, and to spring and lash out his hinder legs, by whipping him when tied between two pillars, with his head a little at liberty. If he understood this to be a punishment for doing so, he would not by that method learn to do

it. He seems to be, in the same manner, taught to spring and fly when he is frightened. Most horses would go quietly past an object they were beginning to fly from, if their riders, instead of gathering up their bridles, and shewing themselves so ready, would throw the reins loose upon their necks.

When a horse starts at any thing on one side, most riders turn him out of the road, to make him go up to what he starts at. If he does not get the better of his fear, or readily comply, he generally goes past the object, making with his hinder parts or croup, a great circle out of the road ; whereas he should learn to keep straight on, without minding objects on either side.

If he starts at any thing on the left, hold his head high, and keep it straight in the road, pulling it from looking at the thing he starts at, and keeping your right leg hard pressed against his side, towards his flank. He will then go straight along the road. By this method, and by turning his head a little more, he may be forced with his croup close up to what frightened him ; for as his head is pulled one way, his croup necessarily turns the other. Always avoid a quarrel with your horse, if you can. If he is apt to start, you will find occasions enough to exercise his obedience, when what he starts at lies directly in his way, and you must make him pass. If he is not subject to start, you should not contend with him about a trifle.

We are apt to suppose that a horse fears nothing so much as his rider. But may he not, in many circumstances, be afraid of instant destruction ? of being crushed ? of being drowned ? of falling down a precipice ? Is it a wonder that a horse should be afraid of a loaded waggon ? May not the hanging load seem to threaten the falling on him ? There cannot be a rule more general than, in such a case, to shew him there is room for him to pass. This is done by turning his head a very little from the carriage, and pressing your leg which is farthest from it, against his side.

A horse is not to stop without a sign from his rider. Is it not then probable that when he is driven up to a carriage, at which he has previously started, he conceives himself obliged either to attack or run against it ? Can he understand the rider's spurring him with his face directed to it, as a sign for him to pass it ? That a horse is easily alarmed for his face and eyes (he will even catch back his head from a hand going to caress him) that he will not go with any force, face to face, even to another horse, if in his power to

stop, and that he sees perfectly sideways, may be useful hints for the treatment of horses with respect to starting.

Though you ought not to whip a horse for starting, there can be no good effect from clapping his neck with your hand, to encourage him. If one took any notice of his starting, it should rather be with some tone of voice which he usually understood as an expression of dislike to what he is doing; for there is opposition mixed with his starting, and a horse will never repeat what he finds has foiled his rider.

Ride with a snaffle, and use your curb, if you have one, only occasionally. Choose your snaffle full and thick in the mouth, especially at the ends to which the reins are fastened. Most of them are made too small and long. They cut the horse's mouth, and bend back over the bars of his jaw working like pincers.

The management of the curb is too nice a matter to enter on here, farther than to prescribe great caution in the use of it. A turn of the wrist, rather than the weight of your arm, should be applied to it. The elasticity of a rod, when it has hooked a fish, may give you some idea of the proper play of a horse's head on his bridle. His spirit and his pliability are both marked by it.

When you ride a journey, be not so attentive to your horse's nice carriage of himself, as to your encouragement of him, and keeping him in good humour. Raise his head; but if he flags, you may indulge him with bearing a little more upon the bit than you would suffer in an airing. If a horse is lame, tender footed, or tired, he naturally hangs upon his bridle. On a journey, therefore, his mouth will depend greatly on his strength and the goodness of his feet. Be then very careful about his feet, and let not a farrier spoil them. You will be enabled to keep them from danger by a few directions, which shall not be very digressive.

When your horse is shod suffer not his feet to be hollowed, but order him to be pared quite flat, and most at the toe. There is generally, a finishing stroke, for the sake of neatness, given by a farrier, at the end of the horn of the hoof, above the shoe. This is the most useful part of the hoof; and whatever is taken from it is like paring the bottom of a post, which, of consequence, weakens it in the most essential way. Let not the heel or frog be pared more than to take off what is ragged or broken. It is still more safe to do that yourself at your leisure, with a knife, than to trust a farrier to pare it in the least.

Very few, although practised in riding, know they have any power over a horse, but by the bridle ; or any use for the spur except to make him go forward. A little experience will teach him a farther use. If the left spur touches him (and he is at the same time prevented from going forward) he has a sign, which he will soon understand, to move sideways to the right ; in the same manner to the left, if the right spur is closed to him. He afterwards, through fear of the spur, obeys a touch of the leg ; in the same manner as a horse moves his croup from one side of the stall to the other, when any one strikes him with his hand. In short, his croup is guided by the leg, as his head is by the bridle. He will never disobey the leg, unless he becomes restive. By this means you will have a far greater power over him ; he will move sideways, if you close one leg to him, and straight forward, if both ; even when he stands still, your legs held near him will keep him on the watch ; and with the slightest unseen motion of the bridle upwards, he will raise his head, and shew his forehead to advantage.

On this use of the legs the rider, and guidance of the croup of the horse, are founded all the airs (as the riding-masters express themselves) which are taught in the manage ; the passage, or side motion of troopers to close or open their files, and indeed all their evolutions. But the convenience of some degree of this discipline for common use, is the reason of mentioning it here. It is useful, if a horse is subject to stumble or start. If to the first, by pressing your legs to his flank, and keeping up his head, he is made to go light on his fore-legs, which is aiding and supporting him ; and the same if he does actually stumble, by helping him at the very instant to exert himself, while as yet any part of him remains not irrecoverably impressed with the precipitate motion. Hence this use of the hand and legs of the rider is called giving *aids* to a horse ; for as to holding up the weight of a heavy inactive horse by mere pulling, it is as impossible as to recover him when falling down a precipice. The same manner is useful if a horse starts ; for, when he is beginning to fly on one side, your leg, on the side he is flying to, stops his spring immediately.

These few rules and observations may perhaps convey some idea of the subject ; but if they should seem insufficient to the end proposed, at least let us hope they will convince the young horseman that some rules are necessary ; and thus convinced, let him apply to able masters in the art for more excellent instruction.

DRIVING.

In the present day, when our nobility and gentry seem to take a pride in becoming experienced *coachmen*, a treatise on this art might find access to the first circles, were it possible to reduce it to a system; but daily experience proves that this cannot be the case, as it is found necessary for those who would *excel* to be the constant companions of their instructors, thus not only learning their skill, but often most disgracefully imitating their manners.

The preceding observations respecting the management of horses in general will, many of them, apply to the art of driving also; but nothing can be effected to any purpose without practice.

One rule it is of importance to mention, the necessity of which is obvious enough, if we consider the frequent disputes which arise, and the many serious accidents which happen, for want of an attention to it. Be it remembered then, that in *meeting* carriages of all sorts you are uniformly expected to take the *left* side of the road, by which means each driver has the right or whip hand opposed to the carriage he meets; in *overtaking* a carriage you wish to pass, you are expected to take the *right* side if possible, because in doing so, the whip hand of the driver you pass is opposed to you, by which means he can more readily avoid you. It follows of course that if you are overtaken by a carriage whose driver expects to pass you, you are expected to take the *left* side.

It is necessary to remark, that in all cases of accidents or disputes, the legislature has very wisely thrown all the damages on those who, violating the above rules, are found on the wrong side of the road.

SWIMMING.

SWIMMING is the art of floating, or supporting the human body on the surface of water, with a progressive undulating motion. This art is in a manner natural to man, and from its evident utility, it has in all ages formed part of the education both of barbarous and civilized nations. As an

outline of the principles on which it is practised may be a mean of saving persons accidentally fallen into deep water, we shall give a few directions to that effect, selected from the instructions of Dr. Franklin. First, the learner ought to walk courageously into the water, till the fluid reaches to his breast; when he must gently decline his belly towards the surface; the head and neck being erect; the breast pressing forward: the thorax being inflated, and the back bent. Next, the legs must be withdrawn from the bottom, while they are extended or stretched out; and the arms should be stricken forwards, corresponding with the motion of the former. Swimming on the back is not essentially different from the method just described, excepting that the arms are not erected, and the progressive motion is derived solely from the striking of the legs. With respect to diving, or plunging under water, Dr. F. observes, that the swimmer must close his hands together; and the chin being pressed upon his breast, he ought to make the exertion to bend forward with energy: while he continues in this position, he should move with velocity under the water; and when he wishes to return to the surface, it will be sufficient to bend his head backward, in consequence of which he will instantaneously rise. From the natural timidity, or antipathy to water, which in some individuals is constitutional, novices in swimming have been advised to employ bladders or corks for the purpose of supporting the body above the surface; a practice which has been severely censured. D. F. is however of opinion, that such auxiliary means are useful, while the pupil is acquiring the mode of drawing in, and striking out, the hands; which is absolutely necessary to a progressive motion. If a person, unacquainted with swimming, and falling accidentally into the water, could have presence of mind sufficient to avoid struggling and plunging, and to let the body take this natural position, he might continue long safe from drowning, till perhaps help would come.

This subject has within the last two or three years been investigated in Nicholson's Philosophical Journal, whence it should seem that if a person could have sufficient presence of mind never to raise his head above water, he could not sink.

SAILING AND ROWING.

SAILING is the movement by which a vessel is wafted along the surface of the water, by the action of the wind upon her sails. As an art it has been brought to great perfection in the present day by the application of geometrical principles.

When a ship changes her state of rest into that of motion, as in advancing out of a harbour, or from her station at anchor, she acquires her motion very gradually, as a body which arrives not at a certain velocity till after a frequent repetition of the action of its weight. The first impression of the wind greatly effects the velocity, because the resistance of the water might destroy it; since the velocity being but small at first, the resistance of the water which depends on it will be very feeble: but as the ship increases her motion, the force of the wind on the sails will be diminished: whereas, on the contrary, the resistance of the water on the bow will accumulate in proportion to the velocity with which the vessel advances. Thus the repetition of the degrees of force, which the action of the sails adds to the motion of the ship, is perpetually decreasing; whilst, on the contrary, the new degrees added to the effort of resistance on the bow are always augmenting. The velocity is then accelerated in proportion as the quantity added is greater than that which is subtracted; but when the two powers become equal, when the impression of the wind on the sails has lost so much of its force, as only to act in proportion to the opposite impulse of resistance on the bow, the ship will then acquire no additional velocity, but continue to sail with a constant uniform motion.

Rowing, or the movement which is given a boat by the impulse of the oar, was brought to considerable perfection by the ancients; indeed the history of naval tactics of both descriptions is calculated to afford great entertainment to those youth whose curiosity is excited towards this subject. The ancient gallies were so constructed as to carry several banks of oars, very differently disposed from those in our modern galleys, which, however, vary the least of any other vessels from their ancient model. Advanced by the force of their oars, the galleys ran violent aboard of each other, and by the mutual concussion of their beaks and prows, and sometimes of their sterns, endeavoured to dash in pieces or

sink their enemies. The prow, for this purpose, was commonly armed with a brazen point or trident, nearly as low as the surface of the sea, to pierce the enemy's ships under the water. Some of the galleys were furnished with large turrets, and other buildings, either for attack or defence. The soldiers also annoyed their enemies with darts and slings, and on their nearer approach with swords and javelins; and that their missive weapons might be directed with greater force and certainty, the ships were equipped with several platforms or elevations above the level of the deck. The sides of the ships were fortified with a thick fence of hides, which served to repel the darts of their adversaries, and to cover their own soldiers, who thereby annoyed the enemy with greater security. But since the invention of gunpowder and the improvement in naval tactics, great alteration is made in the mode of warfare by sea. Navigation is now become, strictly speaking, a science to which, as Englishmen, we are indebted for that pre-eminence by which we are distinguished on the ocean.

As an amusement, however, the use of boats is attended with considerable danger, unless, in all parties of pleasure, some person is present who is acquainted with the management of them. We might particularly notice, that serious accidents frequently arise from the injudicious use of a sail in a small boat, which is constructed entirely for the purpose of rowing. One more caution, as it respects the use of a sailing boat, we think it necessary to give before we close, as we are continually hearing of lives being lost entirely through the neglect of it. It is this, Never to make fast the sheet (or rope) which is attached to the mainsail, and which is designed to regulate the action of the wind upon it; for, though your boat be constructed for the purpose of sailing, by being decked over and properly rigged, even then it is exceedingly dangerous if there be much wind; but if the boat be made for rowing, only carrying a sail occasionally, and you are sailing with a side wind, a sudden squall is almost sure to upset it. Thus has many a fond parent been deprived of his hopes, and many a family been left to mourn.

SKATING.

SKATING is an exercise on the ice, both graceful and healthy. Although the ancients were remarkable for their dexterity in most of the athletic sports, yet skating seems to have been unknown to them. It may therefore be con-

sidered as a modern invention; and probably it derived its origin in Holland, where it was practised, not only as a graceful and elegant amusement, but as an expeditious mode of travelling, when the lakes and canals were frozen up during winter.

In Holland long journeys are made upon skates with ease and expedition; but in general less attention is there paid to graceful and elegant movements, than to the expedition and celerity of what is called journey skating. It is only in those countries where it is considered as an amusement, that its graceful attitudes and movements can be studied; and there is no exercise whatever better calculated to set off the human figure to advantage.

The acquirement of most exercises may be attained at an advanced period of life, but to become an expert skater it is necessary to begin the practice of the art at a very early age. It is difficult to reduce the art of skating to a system. It is principally by the imitation of a good skater that a young practitioner can form his own practice. The English, though often remarkable for feats of agility upon skates, are very deficient in gracefulness; which is partly owing to the construction of the skates. They are too much curved in the surface which embraces the ice, consequently they involuntarily bring the users of them round on the outside upon a quick and small circle; whereas the skater, by using skates of a different construction, less curved, has the command of his stroke, and can enlarge or diminish the circle according to his own wish.

Edinburgh has produced more instances of elegant skaters than perhaps any other city or country whatever; and the institution of a skating club about fifty years ago has contributed much to the improvement of this elegant amusement. A gentleman of that club, who has made the practice and improvement of skating his particular study, gives the following instructions to beginners:

Those who wish to be proficient should begin at an early period of life; and endeavour to throw off the fear which always attends the commencement of an apparently hazardous amusement. They will soon acquire a facility of moving on the inside; when they have done this, they must endeavour to acquire the movement on the outside of the skates; which is nothing more than throwing themselves upon the outer edge of the skate, and making the balance of their body tend towards that side, which will necessarily enable them to form a semicircle. In this much assistance

may be derived from placing a bag of lead shot in the pocket next to the foot employed in making the outside stroke, which will produce an artificial poise of the body, which afterwards will become natural by practice. At the commencement of the outside stroke, the knee of the employed limb should be a little bended, and gradually brought to a rectilineal position when the stroke is completed. When the practitioner becomes expert in forming the semi-circle with both feet, he is then to join them together, and proceed progressively and alternately with both feet, which will carry him forward with a graceful movement. Care should be taken to use very little muscular exertion, for the impelling motion should proceed from the mechanical impulse of the body thrown into such a position as to regulate the stroke. At taking the outside stroke, the body ought to be thrown forward easily, the unemployed limb kept in a direct line with the body, and the face and the eyes directly looking forward: the unemployed foot ought to be stretched towards the ice, with the toes in a direct line with the leg. In the time of making the curve, the body must be gradually, and almost imperceptibly raised, and the unemployed limb brought in the same manner forward; so that, at finishing the curve, the body will bend a small degree backward, and the unemployed foot will be about two inches before the other, ready to embrace the ice, and form a correspondent curve. The muscular movement of the whole body must correspond with the movement of the skate, and should be regulated so as to be almost imperceptible to the spectators. Particular attention should be paid in carrying round the head and eyes with a regular and imperceptible motion; for nothing so much diminishes the grace and elegance of skating as sudden jerks and exertions, which are too frequently used by the generality of skaters. The management of the arms likewise deserves attention. There is no mode of disposing of them more gracefully in skating outside, than folding the hands into each other, or using a muff.

FISHING.

FISHING, in general, is the art of catching fish whether by means of nets, spears, or of the line and hook. It is in this country a source of considerable emolument to those who are employed in it as a branch of commerce.

The situation of the British coasts is the most advan-

tageous in the world for catching fish ; indeed the accounts which are given of the mode of carrying on the British fisheries are very entertaining, while it ought to excite our gratitude to God for the rich provisions with which our shores abound.

As a recreation, however, the mode of fishing chiefly in use is that denominated angling, which is performed by a rod, to which are fitted a line, hook, and bait.

The angler's first business is to attract the fish to the place intended for angling. The method of doing this in standing waters, by throwing in grains, chopped worms, and the like, is well known : but the chief difficulty is in running rivers and brooks. The method in this case is, to prepare a tin box capable of holding some hundreds of worms, bored on all sides, and full of holes of such a size as they may be just able to crawl out at ; there must be a plummet fastened to this box to sink it, and a line to draw it back at pleasure ; in this case it is to be thrown into the water in a proper place, above which the angler may stand under cover. The worms will slowly and gradually crawl out of this box, and the fish will be gathered about to feed on them ; the baited hook is to be thrown in higher up and carried down by the stream. If this method do not bring the fish about the place in a little time, there is reason to suspect that some pike lies lurking thereabout, and deters them : in this case, it is proper to throw out a baited hook, and he will generally be taken ; after this the attempt will succeed.

When the angler takes his stand, he is to shelter himself under some tree or bush, or stand so far from the brink of the water that he can only discern his float ; as the fish are timorous and easily frightened away. The angling rod must be kept in a moderate state, neither too dry nor too moist : in the first case, it will be brittle, in the other rotten. When pastes are used, it is proper to mix a little tow with them, and rub them over with honey : finally, a small anointing with butter is of great use to keep them from washing off the hook. The eyes of any fish that is taken are an excellent bait for almost any other kind of fish. The best way of angling with the fly is down the river, and not up ; neither need the angler ever make above half a dozen trials in one place, either with fly or ground bait, when he angles for trout : by that time the fish will either offer to take, or refuse the bait and not stir at all.

In a pond, the best place for the angler to take his stand is usually that where the cattle go up into water : in rivers,

if breams are fished for, it should be in the deepest and most quiet places; if eels, under the banks of rivers that hang over; perch are to be expected in clean places, where the stream is swift; and chub in deep-shaded holes; roach are mostly found where the perch are, and trout only in swift and clear streams. Places where there are many weeds, or old stumps of trees, harbour fish in great numbers, and they usually bite freely there; but there is danger of entangling the line, or fastening the hook to the weeds. In case of this accident, recourse is to be had to a ring of lead, of about six inches round, fastened to a small packthread; this ring is to be thrust over the rod, and let fall into the water. It will descend to the place where the hook is entangled; and then, by pulling the packthread gently, the hook will be soon disengaged, or at the worst it can only be broke off near the end of the line; whereas, when this is not employed, the rod itself is sometimes broken, or the line nearer its upper end.

Deep waters are best for angling, for the fish do not love to be disturbed by wind or weather.

The openings of sluices and mill dams always bring fish up the current to seek for the food which is brought with the stream; and angling in these places is usually successful.

The best season is from April to October; for in very cold stormy weather the fish will not bite: the best times of the day are from three till nine in the morning, and from three in the afternoon till sunset. In the easterly winds there is never much sport for the angler; the southerly winds are the best for his purpose, and a warm but lowering day is most of all to be chosen; a gentle wind, after a sudden shower, to disturb the water, makes a very good opportunity for the angler; the cooler the weather in the hottest months, the better; but in winter, on the contrary, the warmer the day the better. A cloudy day, after a bright moonlight night, is always a good day for sport; for the fish do not care for going after prey in the bright moonshine, and are therefore hungry the next morning.

DRAWING.

DRAWING is the art of representing, by outlines and shades, the various productions of nature and art, and of enlarging and contracting objects in the most exact proportion.

This art recalls to our memory things long since past, and rescues from oblivion the deeds of our illustrious ancestors, at the same time that it revives their image in our mind, by preserving their features for many generations : in short, it may be said to be the silent but most expressive language of nature, which speaks to the eye, is understood by all nations, and conveys an idea where even words themselves would prove deficient.

The first thing to be observed is, the choice of proper originals ; and here we would recommend *Le Clerc's Principles of Drawing* as the easiest and best calculated for the instruction of beginners. This may be had at most of the booksellers in Great Britain

Having provided this, begin with the outlines of the several features, as the eyes, nose, mouth, ears, &c. as they occur in the book. Practice these often over, till you are quite master of them ; then proceed to a profile, or side face ; after that to an oval or full face ; always remembering that each of these must be perfectly attained before you venture to proceed farther.

When you can copy a face correctly, the next thing is to draw the several limbs or parts of the body, as the hands, arms, legs, feet, &c. then go to the body itself ; which having done, you will be able to undertake a whole figure, observing carefully the exact proportions and bearings of one part with the other.

The learner ought to be particularly cautious that he does not attempt a whole figure, before he has made himself master of the several parts, for this is beginning his work at the wrong end, and almost is similar to a man attempting to raise a building without a foundation.

As for beasts, birds, plants, &c. we deem it useless to give directions for drawing them, as it is well known that he who has so far improved his ideas as to be able to draw a human figure correctly, will find it no difficulty to perform every other branch of this art.

Sketch or draw all your outlines faintly, with a piece of soft charcoal (which may be known by the pith in the middle) cut to a point like a pencil ; and when you see any thing amiss, rub it out with a handkerchief or feather, correct your errors with a black lead pencil, and compare your work with the original, till every part of them correspond. This done, finish your outlines with black lead or Indian ink. This advice, properly attended to, will save you much

trouble in drawing over and over again, to your no small discouragement.

If you prefer Indian ink, rub it with water upon a marble, and with a crow-quill pen perfect your outline; then rub out the marks of the pencil with Indian rubber. Keep three or four different shades of ink in the hollows of your stone, to distinguish your distances, reserving one of the holes for water.

When you are thoroughly versed in the outlines, your next business will be to learn to shade: but of this hereafter, under the articles of light and shade.

Be not too hasty at first setting out, which will but impede your progress, and hinder your improvement: whereas by bestowing a little more time, you will attain perfection sooner than you can well imagine; and expedition will come of itself, as you become more experienced.

Copying.

When you would copy a print or drawing exactly of the same size, rub the back of it with the dust of red chalk or black lead; lay this upon your paper, and pin it down at the four corners; then with a blunt point trace the outlines and breadth of the shadows: which done, having carefully examined it to see that nothing be omitted, take it off, and finish it with the pencil or pen.

Another way to make an exact copy, and at the same time to preserve the original, is to lay a piece of transparent paper upon it, and draw the outlines of it with a black lead pencil; then between that and the paper you intend to draw upon, place a piece of thin post paper, reddened or blackened at the back: after which proceed and trace to finish it according to the foregoing rule.

If you would reverse your original, you need only turn the transparent paper, with the drawing you have made upon it, downwards upon the post paper, and trace it as above directed.

Enlarging and Contracting.

Divide your original with a pair of compasses into any number of squares, and ~~make~~ draw them across with a black lead pencil, from side to side, and from top to bottom.

Then having your paper of the size you intend, divide it

into the same number of squares, either bigger or less, as you enlarge or contract it.

Place your original before you, and draw square by square the several parts, observing to make the part you are drawing fall into the same part of the square as it does in your original. To prevent mistakes, number the squares both of the original and copy.

Then finish the outline with Indian ink, rub out the marks of the pencil with Indian rubber, and shade it at pleasure.

Imitation of Life.

Let the person whose likeness you attempt be of a proportionable size, and well shaped; place him in the easiest and most natural attitude; then with your charcoal sketch faintly the head, or any of the limbs, separately; which having carefully done, proceed to finish with your pencil.

When you have sufficiently practised the several parts or limbs, you may draw the whole figure, in whatever attitude you may think proper to place it; beginning with the easiest, and proceeding by degrees to the more difficult postures, as time and experience shall enable you.

The true proportion which one part of a human figure bears to another, will be seen in the figure from which you draw; which may serve as a standard to examine your drawing by, except where the figure is to be foreshortened, in which case nature will be the best guide.

In drawing a likeness, care must be taken to express the passions in the most lively manner, which is to be done by observing the peculiar cast and disposition of every feature with the exactest nicety; and as this is of all the parts of drawing by far the most difficult, it will require more than ordinary attention, and should be last attempted.

Drapery.

Drapery is the art of clothing your figures with elegance and propriety.

When your naked figure is outlined, first draw the outlines of the drapery lightly, then the greater folds, and afterwards the lesser; observing never to let them cross each other.

Particular regard is to be had to the quality of the drapery as the folds of stuff or woollen cloth are abrupt and harsh, and those of silk more flowing and easy. Linen, cambric, gauze, &c. as their substance is lighter than either, require

a still greater delicacy in expressing the waving of the folds by the faintness of their shadows.

The drapery should not stick too close to the body, but must seem to flow round as it were, yet in such a manner as that the motion of the figure may be free and easy. A great lightness and motion of the drapery should only be used when the figures are supposed to be in much agitation, or exposed to the wind; but in a calm place and free from violent action, their drapery should be large and flowing, in order to give them a more graceful appearance.

Let the loose part of the drapery, blown by the wind, all flow one way; and draw that part which lies closest to the body, before you draw those which fly off.

By observing diligently in what manner the drapery flows upon any person standing or sitting before you for that purpose, you will see in what manner to dispose your folds and shadows, according to the unerring rule of nature.

Landscape.

Landscape represents the face of the country as it appears to our view, with all its various objects, as towns, castles, churches, houses, trees, hills, cattle, rivers, rocks, &c.

Be careful to augment or lessen every object, according to its distance, making the most remote objects fainter and less distinct, as they appear to the eye, and enlarging them proportionably as they draw nearer.

Shew the sky cloudy or clear, as occasion requires; and if you introduce the sun, let it be rising or setting; either of which representations will give an additional grace to your picture, as they represent nature in its liveliest and most agreeable appearance.

Adapt every part of your landscape to the season of the year, and the time of day you intend it to represent; and dispose your lights and shades with consistent propriety.

Lastly, we would recommend it to practitioners in this noble art, to rise early in a fine morning, that they may have a better idea of the harmony and beauty of the works of the great Creator; which would wonderfully replenish their minds as to colour and effect.

Light and Shade.

The true distribution of light and shade in a picture is absolutely necessary to be known; for it not only determines the proper distance of one object from another (without which the whole would be an undistinguishable mass of

confusion) but it gives likeness to each respective object, its substance, roundness, and effect.

Shading is performed with the pen or pencil; in either of which great judgment is required. Having made your outlines correct, the first thing is, to observe from which side of the original the light comes in; which, if natural, is either from the right hand or the left; for, whenever the light appears in the middle of the picture, and seems to glare more than ordinary, it is caused by a candle, a lamp, or some other luminous body, which is called an artificial light. Lay on your little tints first, disposing them as you see they are done in the original; and then proceed to the deeper ones, till you come to the darkest parts of all; for you may at any time darken your shadows, when you cannot lighten them.

Let all your shadows in the same place fall on the same side; that is, if the right side of a man's face be dark, so must the right side of his body, arm, leg, thigh, &c. But if the light side be darkened by the opposition of some other body intercepting the light, it must receive a contrary shadow. Make your shadows fainter as they grow towards the light, breaking them gradually, that they may not appear too sudden or harsh.

When part of the body projects over or before another, the part projecting must receive a stronger light: those parts that bend inward must be made so much the darker, and shaded deepest next the light.

By frequently examining into nature, you will have an opportunity of improving your ideas of light and shade, and will be enabled to form a proper judgment of the effect which the different rays or degrees of light will produce in a picture; for which reason you should never let slip an opportunity of remarking the various appearances you meet with.

MUSIC.

THERE is hardly any study which depends so much on the natural taste of the individual who pursues it as that of music. As a science it is most curious and interesting, and has recently called in the aids of natural philosophy in order to elucidate and explain some of its principles.

As a recreation, however, it is calculated to afford considerable delight, where the ear and the heart are formed to enjoy it; but it is impossible for any assiduity to create a taste for it where it is not inherent.

Music in general is the art of combining sounds in a manner agreeable to the ear. This combination may be either simultaneous or successive : in the first case it constitutes harmony ; in the last melody. By melody the successions of sound are regulated in such a manner as to produce pleasing airs. Harmony consists in uniting to each of the sounds, in a regular succession, two or more different sounds, which simultaneously striking the ear, soothe it by their concurrence. In this country, as well as in France, there is not that natural love of harmony which there is in many others. Speaking of the national character of both countries as it respects music, we may say, Give an Englishman a simple melody set to a few patriotic words, or a Frenchman a dance, and they neither of them seem to have any further ideas of the power or use of music ; whereas in Italy, and even in Germany, the feeling of enjoyment which is produced by that combination of sounds properly denominated harmony, is discoverable even in the minds of the common people.

Nevertheless there are a few persons in this country who do possess a considerable degree of natural taste for music. To them we would recommend to study well their own capacity, and to attempt that style of music in which they are most likely to excel, if they mean to derive any enjoyment from it. We make this observation because we often observe in persons a desire to become performers on various instruments, in which neither their time nor capacities will ever allow them to succeed, and by which means many of the precious hours of a short life are squandered away, producing only a greater degree of mortification than enjoyment. If you have both ear and voice, and can associate with others of the same talents and dispositions, we recommend an attention to vocal harmony as productive of the most enjoyment with the least labour ; and if in addition to this any instruments are attempted, the pianoforte, the violin, and the flute, seem on the whole most desirable. It is scarcely necessary to add, that facilities for learning music both as to books and instructors, are afforded in almost every great town in the kingdom.

CHess.

This game is said to have had its origin in the fifth century, at the court of a powerful prince in the Indies, who

had forced a great number of sovereigns to pay tribute to him, and submit to his government.

Forgetting that a king ought to be the father of his people, he grievously oppressed them, and put to death those who dared to remonstrate with him; till the people, borne down by the weight of insupportable tyranny, began to revolt, and the tributary princes, persuaded that in losing the love of his people he had lost the essence of his power, were preparing to throw off the yoke, and to carry war into his estates. At length a Brahmin, or Indian philosopher, named Sissa, the son of Daher, touched with the misfortunes of his country undertook to make the prince open his eyes to the fatal effects which his conduct was likely to produce. But instructed by the example of those who had gone before him, he was sensible his lesson would not prove of any service, until the prince should make the application of it to himself, and not think that it was done by another. With this view he invented the game of chess, where the king, although the most considerable of all the pieces, is both impotent to attack, as well as defend himself against his enemies, without the assistance of his subjects and soldiers.

The new game soon became famous; the king of the Indies heard of it, and would learn it. The Brahmin Sissa was pitched upon to teach him; and under the pretext of explaining the rules of the game, and shewing him the skill required to make use of the other pieces for the king's defence, he made him perceive and relish important truths which he had hitherto refused to hear. The king, convinced that in the people's love of their king consisted all his strength, altered his conduct, and prevented the misfortunes that threatened him.

We subjoin a short account of the manner in which this game is performed, which is extracted from a recent publication, entitled "Chess made easy," &c. to which we refer the reader for more particular information.

Rules for playing Chess.

This ingenious game is performed with different pieces of wood, on a board divided into sixty-four squares or houses; in which chance has so small a share, that it may be doubted whether a person ever lost a game but by his own fault.

Each gamester has eight dignified pieces, namely, a king, a queen, two bishops, two knights, and two rooks; also eight pawns; each set of which, for distinction sake, are painted of two different colours, as white and black.

As to the disposition on the board; the white king is to be placed on the fourth black house from the corner of the board, in the first and lower rank; and the black king is to be placed on the fourth white house, on the opposite, or adversary's end of the board; the queens are to be placed next to the kings, on houses of their own colour. Next to the king and queen on each hand, place the two bishops; next to them the two knights; and last of all, on the corners of the board, the two rooks. As to the pawns, they are placed without distinction on the second rank of the houses, one before each of the dignified pieces.

Having thus disposed of the men, the onset is generally begun by the pawns, which march straight onward in their own file, one house at a time, except at the first move, which may be two houses; but pawns never move backwards. The manner of their taking the adversary's men is sideways, in the next house forwards; where having made captures of the enemy, they move forward as before. The rook goes forward or crosswise, through the whole file and back again. The knight skips backward and forward to the next house save one of a different colour, with a sidling march or slope; and thus kills his enemies that fall in his way, or guards his friends that may be exposed on that side. The bishop walks always in the same colour of the field that he is placed in at first, forward and backward, alsope and diagonally, as far as he lists. The queen's walk is the most extensive, and she takes all the steps of the before-mentioned pieces, excepting that of the knight; and as to the king's motion it is one house at a time, and that either forward, backward, sloping, or sideways.

As to the value of the different pieces: next to the king is the queen; after her the rooks; then the bishops; and last of the dignified pieces come the knights. The difference of the worth of pawns is not so great as that of noblemen: only it must be observed, that the king's bishop's pawn is the best in the field; and therefore the skilful gamester will be careful of him. It ought also to be observed, that, whereas any man may be taken when he falls within the reach of any of his adversary's pieces, it is otherwise with the king, who in such a case is only to be saluted with the word *check*, warning him of his danger, out of which it is absolutely necessary that he move; and if it so happens that he cannot move without exposing himself to the like inconvenience, it is *check-mate*, and the game is lost. The rules of the game are as follow:

1. In order to begin the game, the pawns must be moved before the pieces, and afterwards the pieces must be brought out to support them. The king's, queen's, and bishop's pawns should be moved first, that the game may be well opened. The pieces must not be played out early in the game, because the player may thereby lose his move; but, above all, the game should be well arranged before the queen is played out. Useless checks should also be avoided, unless some advantage is to be gained by them, because the move may be lost, if the adversary can either take or drive the piece away.

2. If the game is crowded, the player will meet with obstructions in moving his pieces: for which reason he should exchange pieces or pawns, and castle his king as soon as convenient, endeavouring at the same time to crowd the adversary's game, which may be done by attacking his pieces with the pawns, if the adversary should move his pieces out to soon.

3. The men should be so guarded by one another, that if a man should be lost, the player may have it in his power to take one of the adversary's in return: and if he can take a superior piece in lieu of that which he has lost, it would be an advantage, and distress the adversary.

4. The adversary's king should never be attacked without a force sufficient; and if the player's king should be attacked without having it in his power to attack the adversary's, he should offer to make an exchange of pieces, which may cause the adversary to lose a move.

5. The board should be looked over with attention, and the men reconnoitred, so as to beware of any stroke that the adversary might attempt in consequence of his last move. If, by counting as many moves forward as possible, the player has a prospect of success, he should not fail doing it, and even sacrifice a piece or two to accomplish his end.

6. No man should be played till the board is thoroughly examined, that the player may defend himself against any move the adversary may have in view; neither should the attack be made till the consequences of the adversary's next move are considered; and when an attack may with safety be made, it should be pursued without catching at any loss that might be thrown out, in order for the adversary to gain a move, and thereby cause the design to miscarry.

7. The queen should never stand in such a manner before the king, that the adversary, by bringing a rook, or a bishop, could check the king if she were not there; as it might be the loss of the queen.

8. The adversary's knight should never be suffered to check the king and queen, or king and rook, or queen and rook, or the two rooks at the same time; especially if the knight is properly guarded; because in the two first cases, the king being forced to go out of check, the queen or the rook must be lost: and in the two last cases a rook must be lost at least, for a worse piece.

9. The player should take care that no guarded pawn of the adversary's fork two of his pieces.

10. As soon as the kings have castled on different sides of the board, the pawns on that side of the board should be advanced upon the adversary's king, and the pieces, especially the queen and rook, should be brought to support them; and the three pawns belonging to the king that is castled must not be moved.

11. The more moves a player can have as it were in ambuscade, the better; that is to say, the queen, bishop, or rook, is to be placed behind a pawn or piece, in such a position, as that upon playing that pawn or piece, a check is discovered upon the adversary's king, by which means a piece of some advantage is often gained.

12. An inferior piece should never be guarded with a superior, when a pawn would answer the same purpose; for this reason the superior piece may remain out at play: neither should a pawn be guarded with a piece, when a pawn would do as well.

13. A well supported pawn, that is passed, often costs the adversary a piece; and when a pawn, or any other advantage, is gained, without endangering the loss of the move, the player should make as frequent exchanges of pieces as he can. The advantage of a passed pawn is this, for example: If the player and his adversary have each three pawns upon the board and no piece, and the player has one of his pawns on one side of the board, and the other two on the other side, and the adversary's three pawns are opposite to the player's two pawns, he should march with his king as soon as he can, and take the adversary's pawns; if the adversary goes with his king to support them, the player should move to queen with his single pawn, that is, to move a pawn into the adversary's back row, which is the rule at this game, when the original is lost; and then if the adversary goes to hinder him, he should take the adversary's pawns, and move the two to queen.

14. When the game is nearly finished, each party having only three or four pawns on each side of the board, the king must endeavour to gain the move in order to win the game.

For instance, when the player brings his king opposite to the adversary's, with only one square between, he will gain the move.

15. If the adversary has his king and one pawn on the board, and the player has only his king, he cannot lose the game, provided he brings his king opposite to the adversary's, when the adversary is directly before, or on one side of his pawn, and there is only one square between the kings.

16. If the adversary has a bishop, and one pawn, on the rook's line, and this bishop is not of the colour that commands the corner square the pawn is going to, and the player has only his king, if he can get into that corner, he cannot lose; but on the contrary may win by a *stale*.

17. If the player has greatly the disadvantage of the game, having only his queen left in play, and his king happens to be in a position to win, as above mentioned, he should keep giving check to the adversary's king, always taking care not to check him where he can interpose any of his pieces that make the stale; by so doing he will at least force the adversary to take his queen, and then he will win the game by being in a stale-mate.

18. The player should never cover a check with a piece that a pawn pushed upon it may take, for fear of getting only the pawn in exchange for the piece.

19. A player should never crowd his adversary up with pieces, for fear of giving a stale-mate inadvertently; but always should leave room for his king to move.

By way of corroborating what has been already said with respect to this game, it is necessary to warn a player against playing a timid game. He should never be too much afraid of losing a rook for an inferior piece; because although a rook is a better piece than any other, except the queen, it seldom comes into play to be of any great use till the end of the game; for which reason it is often better to have an inferior piece in play than a superior one to stand still, or moving to no great purpose. If a piece is moved, and is immediately driven away by a pawn, it may be reckoned a bad move, because the adversary gains a double advantage over the player, in advancing at the same time the other is made to retire. Although the first move may not seem of consequence between equal players, yet a move or two more lost after the first, makes the game scarcely recoverable.

There never wants variety in this game, provided the pieces have been brought out regularly; but if otherwise, it often happens that a player has scarce any thing to play.

Many indifferent players think nothing of the pawns; whereas three pawns together are strong; and four, which constitute a square, with the assistance of other pieces well managed, make an invincible strength, and in all probability may produce a queen, when very much wanted. It is true, that two pawns with a space between are no better than one; and if there should be three over each other in a line, the ~~we~~ cannot be in a worse way. This shews the pawns are of great consequence, provided they are kept close together.

If the queen and another piece are attacked at the same time, so as that by removing the queen, the piece must be lost—provided two pieces can be gained in exchange for the queen, the queen should be given up; it being the difference of three pieces, and consequently more than the value of the queen. By losing the queen, the game is not thrown into that disorder which it would otherwise have been: in this case it would be judicious to give the queen for even a piece, or a pawn or two; it being well known among good players, that he who begins the attack, and cannot maintain it, being obliged to retire, generally loses the game.

When the game is almost drawn to a conclusion, the player should recollect that his king is a capital piece, and consequently should keep him in motion; by so doing he generally gets the move, and often the game.

If a man can be taken with different pieces, the player should consider which of the pieces is the best to take it with.

If a piece can be taken almost at any time, the player should not be in a hurry about it, but try to make a good move elsewhere before he takes it.

After all that has been said, it is still necessary to advise those who would play well at this game to be very cool and attentive; for it is impossible that any person can play at chess if his thoughts are employed elsewhere.

The laws of the game are: 1. If a player touches a man, he must play it; and if he quits it, he cannot recall it. 2. If by mistake, or otherwise, a false move is played, and the adversary takes no notice of it till he has played his next move, it cannot be recalled by either of the parties. 3. If a player misplaces the men, and he plays two moves, it is at the option of the adversary to permit him to recommence the game or not. 4. If the adversary plays, or discovers a check to a player's king, and gives no notice of it, the player may let him stand till he does. 5. After the king is moved, a player cannot castle.

PART XII.

MISCELLANEOUS ARTICLES.

COMMERCIAL AFFAIRS.

THE trade of Great Britain with foreign nations is carried on partly by companies, and partly by private merchants. The most considerable companies are the following, though most of them are now in part superseded by the permission since granted to private merchants. It is thought proper to enumerate them here, on account of the references frequently made to them in the history of mercantile transactions.

1. The most ancient trading company in Britain is that which goes now by the name of the *Hamburg Company*. They were originally called Merchants of the Staple, and afterwards Merchant Adventurers. They were first incorporated in the reign of King Edward, anno 1296, and obtained leave of John, Duke of Brabant, to make Antwerp their staple or mart, where the woollen manufactures at that time flourished. The staple was afterwards removed to Calais, and from that to other places, and in the reign of Queen Elizabeth to Hamburg, where it still continues. But private merchants are now allowed the privilege of this trade, upon paying a very small sum to the company.

2. The company next incorporated was that of the *Russian Merchants*, in the reign of Queen Mary, who were empowered to trade to all lands, ports, and places, in the dominions of the Emperor of Russia. This company is not very considerable at present, the trade to these places being mostly carried on by private merchants, who are all that privilege on payment of five pounds sterling.

3. The next company is the *Eastland Company*, formerly called Merchants of Elbing, a town in Polish Prussia, being the port they principally resorted to in the infancy of their trade. They were incorporated the 21st of the reign of Queen Elizabeth, and empowered to trade to all places with

in the Sound, except Narva, the only Russian port at that time in the Baltic. This company, like the former, is now inconsiderable, the trade to Norway and Sweden being laid open to private merchants, by act of parliament.

4. The *Turkey or Levant Company* was also erected in the reign of Queen Elizabeth, and their privileges confirmed and enlarged in the reign of King James I. being empowered to trade to the Levant, or eastern part of the Mediterranean, particularly to Smyrna, Aleppo, Constantinople, Cyprus, Grand Cairo, Alexandria, &c. This trade is also now laid open to private merchants, upon paying a small consideration.

5. The *East India Company* comes next, which was incorporated about the 42nd of Queen Elizabeth, in 1600, and empowered to trade to all countries to the eastward of the Cape of Good Hope, exclusive of all others. But about the year 1698, application being made to the parliament by private merchants, for laying this trade open, an act passed, empowering every subject of England, upon raising a sum of money for the support of the government, to trade to those parts. Upon which a great many subscribed, and were called the New East India Company. But the old company being masters of all the forts on the coast of India, the new company found it their interest to unite with them, and trade with one joint stock; and have ever since been styled the United East India Company. The most considerable forts, factories, and places of trade, wherein this company are concerned, are these following, namely: Mogha, or Moco, Tden, Maculla, Shahare, Dofar, Muscat, in Arabia Felix; Bassora, Ispahan, Gombroon, in Persia; Cambaya, Amedabad, Baroch, Swalley, Suat, upon the South-west coast of the Great Mogul's empire; Bombay, Dabul, Cannar, on the coast of Decan; Tellechery, Calecut, Anjengo, on the coast of Malabar; Fort St. David, Conymere, Fort St. George, on the coast of Coromandel; Masulapatan, Vizzagapatan, Ballasore, Fort William, Hugley, Cassumbazar, Dacca, in the Bay of Bengal and mouth of the river Ganges; Bantol, Cattoun, Ippo, Marlborough Fort, Sillebar, in the island of Sumatra; Canton, Amoy, Chusan, in China. But the charter of this company having recently expired, a new one has been granted, by which the trade to some of the above places is thrown open under certain restrictions.

6. The *Royal African Company* was incorporated 14th Charles II. and empowered to trade from Sallec, in south arhary, to the Cape of Good Hope, and to erect forts and stories on the western coast of Africa for that purpose

But this trade was laid open by act of parliament in 1697, and every private merchant permitted to trade thither upon paying £10. towards maintaining the forts and garrisons : this company, for securing their commerce, erected several forts and factories on the coast ; the most remarkable whereof are these, namely, on the north part of Guinea, James Fort upon an island in the river Gambia, Sierra Leone, and Sherbro ; and on the south part of Guinea, namely, on the Coast, Dick's Cove, Secunde, Commenda, Cape Coast Castle, Port Royal, Queen Anne's Point, Charles Fort, Annamabo, Winneba, Stidoes, and Acra.

7. *Hudson's Bay Company* is of a pretty old standing, and trades to Hudson's Bay, to which the company take their name, and the places about. They make a very advantageous trade, by exporting woollen goods, haberdashery wares, knives, hatchets, and other hard ware ; and in return they bring back skins, beaver, and furs.

8. The last of all the trading companies is that of the *South Sea*, established by act of parliament in the 9th of Queen Anne, and vested in the sole trade to and from all lands and kingdoms on the east side of America, from the river Oroonoko to the most southern part of Terra del Fuogo, and from thence to the most northern part of America on the west side.

THE LAW OF ENGLAND.

The municipal law of England, or the rule of civil conduct prescribed to the inhabitants of this kingdom, may with sufficient propriety be divided into two kinds ; *lex non scripta*, the unwritten or common law ; and *lex scripta*, the written or statute law.

The unwritten law includes not only general customs, or the common law properly so called, but also the particular customs of certain parts of the kingdom, and likewise those particular laws that are by custom observed only in certain courts and jurisdictions. In calling these parts of the law *leges non scripte*, we would not be understood, as if all these laws were at present merely oral or communicated from the former ages to the present solely by word of mouth. It is true, indeed, that in the profound ignorance of letters which

formerly overspread the western world, all laws were entirely traditional; for this plain reason, that the nations among which they prevailed had but little idea of writing. Thus the British as well as the Gallic druids, committed all their laws as well as learning to memory; and it is said of the primitive Saxons here, as well as their brethren on the continent, that *leges solum memoria et usu retinebant*. But with us at present, the monument and the evidences of our legal customs are contained in the records of the several courts of justice, in books of reports and judicial decisions, and in the treatises of learned sages of the profession, preserved and handed down to us from the times of the highest antiquity. However, we therefore style these parts of our law *leges non scriptæ*, because their original institution and authority are not set down in writing, as acts of parliament are; but they receive their binding power, and force of laws, by long and immemorial usage, and by their universal reception throughout the kingdom.

Our antiquarians and first historians do all positively assure us that our body of laws is of a compound nature. For they tell us, that in the time of Alfred the local customs of the several provinces of the kingdom were grown so various, that he found it expedient to complete his dome-book, for the general use of the whole kingdom. This book is said to have been extant so late as the reign of Edward IV, but it is now unfortunately lost.

But the irruption and establishment of the Danes in England, which followed soon after, introduced new customs, and caused this code of Alfred in many provinces to fall into disuse, or at least to be mixed and debased with other laws of a coarse alloy. So that about the beginning of the eleventh century there were three principal systems of laws prevailing in different districts.

The oldest of the written laws now extant, and printed in our statute books, is the famous *magna charta*, as confirmed in parliament, 9th Henry III.; though doubtless there were many acts before that time, the records of which are now lost, and the determinations of them perhaps at present currently received for the maxims of the old common law.

These are the several grounds of the laws of England: over and above which, *equity* is frequently called in to assist, to moderate and explain them. What equity is, and how impossible in its very essence it is to be reduced to stated rules, may easily be conceived. It may be sufficient, therefore, to add in this place, that besides the liberality of sen-

ment with which our common law judges interpret acts of parliament, and such rules of the unwritten law as are not of a positive kind, there are also courts of equity established for the benefit of the subject; to detect latent frauds and concealments which the process of the courts of law is not adapted to reach; to enforce the execution of such matters of trust and confidence as are binding in conscience, though not cognizable in a court of law; to deliver them from such dangers as are owing to misfortune or oversight; and give a more specific relief, and more adapted to the circumstances of the case, than can always be obtained by the generality of the rules of the positive or common law. This is the business of the courts of equity, which however are only conversant in matters of property. For the freedom of our constitution will not permit, that in criminal cases a power should be lodged in any judge to construe the law otherwise than according to the letter. This caution, while it admirably protects the public liberty, can never bear hard upon individuals. A man cannot suffer more punishment than the law assigns, but he may suffer less. The laws cannot be strained by partiality to inflict a penalty beyond what the letter will warrant: but in cases where the letter induces any apparent hardship, the crown has the power to pardon.

The following explanation of some of the terms frequently employed in the accounts of law transactions may be found useful.

JUDGE; an officer appointed by the sovereign powers of any country, to distribute that justice to their subjects which they cannot administer in person. The character of judge is a part of the regal authority whereof the king divests himself. The chief function of judges is for the trial of causes both civil and criminal.

SERGEANT, or Sergeant at Law, is the highest degree taken in the common law, as that of doctor is in the civil law.

Sergeants are called by the king's mandate or writ, directed to them, commanding them to take upon them that degree. Of *counsellors* there are two degrees, *barristers* and *sergeants*. Barristers, after having been admitted five years in any of the inns of court, such as Lincoln's Inn, the Temple, &c. are called to the bar; and after sixteen years' standing they may be called to the degree of sergeants.

Out of these the king's counsel is usually selected, to plead for him in all causes, especially treason; the two principal of whom are called his attorney and solicitor general, who are always members of parliament. The king's

counsel cannot be employed in any cause against the crown, without special licence. They are heard before other counsel, and even before sergeants.

CORONER; an officer, whereof there are two in every county, whose business is to enquire, by a jury of twelve neighbours, how and by whom any person came by a violent death, and to enter the same upon record.

Mention is made of this officer as early as the time of King Athelstan, in 925.

The Lord Chief Justice of the King's Bench is the sovereign coroner of the whole realm, or wheresoever he abides.

There are also certain special coroners within divers liberties, as well as the ordinary officers in every county: and some colleges and corporations are empowered by their charters to appoint their coroner within their own precincts.

JUSTICE; an officer appointed by the king or commonwealth, to do right by way of judgment.

Chief Justice of the King's Bench, is the capital justice of Great Britain, and a lord by his office. His business is chiefly to hear and determine all pleas of the crown; that is, such as concern offences against the crown, dignity, and peace of the king, as treasons, felonies, &c.

Chief Justice of the Common Pleas, he who, with his assistants, hears and determines all causes at the common law, that is to say, all civil causes between common persons, as well personal as real.

Justice of the Forest, is a lord by his office, who has power and authority to determine offences committed in the king's forests, &c. which are not to be determined by any other court or justice. Of these there are two, whereof one has jurisdiction over all the forests on this side the Trent, and the other beyond it.

Justices of the Peace, are persons of interest and credit, appointed by the king's commission to attend the peace of the county where they live.

The original of justices of the peace is referred to the fourth year of Edward III. They were first called *conservators*, or *wardens of the peace*.

INNS OF COURT.—Our colleges of municipal or common law professors and students are still called Inns; the old English word for houses of noblemen, bishops, and others of extraordinary note: being of the same signification with the French word *hotel*.

Of these we have four, namely, the two Temples, heretofore the dwelling of the knights-templars, purchased by

some professors of the common law, about 300 years ago; and Lincoln's Inn, and Gray's Inn, anciently belonging to the earls of Lincoln and Gray.

JURY, in common law, signifies twenty-four, or twelve men, sworn to enquire of a matter of fact, and declare the truth upon such evidence as shall be delivered them touching the matter in question.

The jury is to be chosen out of the same class or rank with the accused; and if he be a foreigner, he may demand a jury half foreigners and half Englishmen.

There are ordinarily thirty-six impannelled, whereof, in criminal cases, the person accused has the liberty to challenge or set aside twenty-four, and to pick out twelve at his pleasure. These twelve are present at the trial; after which they withdraw into a chamber by themselves, where they are to be shut up without fire or candle, victuals or drink, till such time as they agree in their verdict, and declare unanimously, that the defendant is either guilty of the charge laid against him, or not guilty: upon which the judge passes the sentence prescribed by the law.

In the general assize there are usually many juries, because there are a great many causes, both civil and criminal, commonly to be tried; whereof one is called the grand jury, and the rest the petit juries, of which, it seems, there should be one in every hundred.

Grand Jury consists of twenty-four grave and substantial gentlemen, or some of the better sort of yeomen, chosen indifferently by the sheriff out of the whole shire, to consider of all bills of indictment preferred to the court; which they do either approve by writing upon them *billa vera*, or disallow, by indorsing *ignoramus*.

Such as they do approve, if they touch life and death, are farther referred to another jury, to be considered of, because the case is of much importance.

Petit Jury consists of twelve men at the least, and are impannelled as well upon criminal as upon civil causes. Those that pass upon offences of life and death bring in their verdict either guilty or not guilty; whereupon the prisoner, if he be found guilty, is said to be convicted, and receives judgment and condemnation, or otherwise is acquitted and set free.

Those that pass upon civil causes real, are all, or so many as can conveniently be had, of the same hundred where the land or tenement in question doth lie, being four at least;

and they, upon due examination, bring in their verdict either for the demandant or tenant.

This is the distinguishing privilege of every Briton, and one of the most glorious advantages of our constitution; for, as every one is tried by his peers, or equals, the meanest subject is as safe and free as the greatest.

ASSISE, or Assizes; in law, a sitting of judges or justices, for the hearing and determining of causes. The word is French, *assise*, or *assis*, seated; formed of the Latin *assideo*, I sit by; which is compounded of *ad*, to, and *sideo*, I sit.

General Assize, or Assizes, are those held by the judges twice a year, in their several circuits.

The nature of these assizes is explained by Lord Bacon, who observes, that all the counties of the kingdom are divided into six circuits; through each of which two learned men, assigned by the king's commission, ride twice a year, (except in Middlesex and the four northern counties, where the assizes are taken only once a year,) called justices, or judges of assize, who have several commissions, by which they sit, namely,

First—*A commission of oyer and terminer*, directed to them, and many others of the best account in their respective circuits. In this commission the judges of assize are of the quorum; so that without them there can be no proceeding. This commission gives them power to deal with treasons, murders, felonies, and other misdemeanours.

The second is of *jail delivery*, which is only to judges themselves, and the clerk of the assize associate. By this commission they have to do with every person in the jail, for what offence soever.

The third is directed to themselves and the clerk of the assize, to take writs of possession, called also assizes, and to do right and justice thereupon.

The fourth is to take *nisi prius*, directed to the justices and the clerks of assizes; whence they are also called justices of *nisi prius*.

The fifth is a commission of peace, in every county of their circuits, and all the justices of the peace, having no lawful impediment, are bound to be present at the assizes, to attend the judges.

The sheriff of every shire is also to attend in person, or by sufficient deputy allowed by the judges, who may fine him if he fail.

This excellent constitution of judges, circuits, and assizes,

was begun in the time of Henry II. though somewhat different from what it is now.

FELONY is he that commits felony, by willingly and deliberately killing himself.

The Saxons called him self-bane. The law says, he is to be interred without Christian burial, with a stake driven through his corpse; and to forfeit his goods.

FELONY was anciently used for a violent and injurious action of a vassal or tenant, against his lord.

Felony is now used in common law for any capital offence perpetrated with an evil intention.

Felony includes several species of crimes, whose punishment is death, such as murder, theft, wilful burning of houses, &c.

Felony is also punished by loss of lands, not entailed, and all goods and chattels, both real and personal; though the statutes make a difference in some cases concerning lands.

PERJURY is the crime of swearing falsely in a lawful oath, administered by one who has authority, in any matter relating to a cause in question, whether it be of a person's own accord, or by subornation of another.

The law takes no notice of any perjury, but such as is committed in some court of justice, or before some magistrate invested with proper authority. The perjury must be corrupt, wilful, positive, and absolute; not upon surprise or the like, but it must appear to be committed *malo animo*, with a bad intent; and it must be in some point material to the question in dispute.

LARCENY is a theft of personal goods or chattels in the owner's absence. Larceny is distinguished into two sorts, *great* and *small*.

Great Larceny is when the things stolen, though severally, exceed the value of 12s.

Petty Larceny is when the goods stolen exceed not the value of 12d.

When it is done by force it is called robbery. Plain theft, unaccompanied with any other atrocious circumstances, is also deemed *simple larceny*, and when it includes in it the aggravation of taking from one's house or person, it is called *mixed* or *compound larceny*.

TREASON imports a betraying, treachery, or breach of faith. It therefore happens only between allies. For treason is indeed a general appellation, made use of by the law to denote not only offences against the king and government, but also that accumulation of guilt which

arises when a superior reposes confidence in a subject or inferior, between whom and himself there subsists a natural, a civil, or even a spiritual relation; and the inferior so abuses that confidence, so forgets the obligations of duty, subjection, and allegiance, as to destroy the life of any such superior. And therefore, for a wife to kill her husband, a servant his master, these breaches of domestic faith are denominated *petit treason*. But when disloyalty so rears its crest, as to attack even majesty itself, it is called by way of distinction *high treason*.

BENEFIT OF CLERGY is an ancient privilege of the church, which was admitted even in cases of murder: but the ancient course of the law is much altered on this head. By the statutes of Elizabeth, clerks are no more committed to the ordinary to be purged; but every man to whom the benefit of clergy is granted, though not in orders, is put to read at the bar, after he is found guilty and convicted of such felony, and so burnt on the hand, and set free for the time, if the ordinary or deputy standing by do say, *legit ut clericus*, otherwise he shall suffer death.

It had its rise in the pious reverence which the first Christian princes paid the church in its infant state; and was intended to exempt the clergy from being criminally proceeded against by lay judges. Popish ecclesiastics soon made an ill use of this, for they afterwards claimed this indulgence, not only for themselves, but for all attendants upon the church, and at length all that could read had the same indulgence; *reading* being a mark of great learning in those days.

BURGLARY has been always deemed a heinous offence. It may be defined *nocturnal housebreaking*. The law has so tender a regard for the safety of a man's house, that it styles it his castle, and will never suffer it to be violated with impunity. Sir Edward Coke's definition of a burglar is, "he that by night breaketh and entereth into a mansion-house, with intent to commit a felony." In this definition there are four things; the *time*, the *place*, the *manner*, the *intent*. Burglary is a *felony* at common law, but within the benefit of clergy.

MANSLAUGHTER is a species of felonious homicide, and denotes the unlawful killing a man, without any malice, either express or implied; which may be voluntary, upon sudden heat; or involuntary, but in the commission of some lawful act. As when two persons, who before meant no harm to one another, falling out upon some sudden occasion,

the one kills the other, this is involuntary manslaughter; but in this, and every case of homicide, upon provocation, if there be a sufficient time for passion to subside, and the person provoked afterwards kill the other, this is deliberate revenge, and amounts to murder.

HABEAS CORPUS, in law, a writ which a man indicted and imprisoned for any crime or trespass, before the justices of peace, or in a court of franchise (having offered sufficient bail, which is refused though the case be bailable) may have out of the King's Bench, thereby to remove himself thither, at his own costs, to answer the cause at the bar thereof.

The order in this case is first to procure a writ of *certiorari* out of the chancery, directed to the said justices, for removing the indictment into the King's Bench, and upon that to procure this writ to the sheriff, for causing his body to be removed at a certain day.

Habeas Corporu is also a writ that lays for bringing in a jury, or so many of them as refuse to come upon the *venire facias*, for the trial of a cause to be brought to issue.

MORTGAGE is an obligation, whereby lands or tenements of a debtor are pawned or bound over to the creditor, for money or other effects borrowed; peremptorily to be the creditor's for ever, if the money be not repaid at the time agreed on. He who borrows the money is called the mortgager, and he that lends is the mortgagee.

FREEHOLD is land or tenement which a man holds in fee-simple, fee-tail, or for life. Freehold is of two kinds, in *deed* and in *law*. The first is the real possession of land or tenement, in fee, fee-tail, or for life: the other is the right a man has to such land or tenement before his entry or seizure. Whatever is part of the freehold goes to the heir; and things fixed thereto may not be taken in distress for rent or in execution, &c. Freehold estates of certain value are required by statutes to qualify jurors and electors. But a person to be qualified for electing knights of the shire in parliament, must have freehold of no less than forty shillings a year.

COPYHOLD is a tenure for which the tenant has nothing to shew but the copy of the roll made by the steward of the lord's court.

The steward of the court, is among other things, to enrol and keep a register of all such tenants as are admitted to any parcel of land or tenement, belonging to the manor,

and the transcript is called the copy of the court-roll, which the tenant keeps as his own evidence.

This tenure is called a base tenure, because the tenant holds, in some sort, at the will of the lord. Fitzherbert says, it was formerly called tenure in villanage; and that copyhold is but a modern name. However, it is not simply at the lord's will, but according to the custom of the manor; so that if the copyholder doth not break that custom and forfeit his tenure, he seems not to stand at the lord's courtesy. These customs are infinite, varying in one point or other almost in every manor.

LEASE, in law, is a letting of lands, tenements, &c. unto another for life, or for a term of years, or at will for a rent reserved. A lease when written is called an indenture. The party who lets a lease is called the *lessor*, and the party to whom it is let the *lessee*.

SUBPŒNA; a writ, whereby any person under the degree of peerage, is called to appear in chancery, in cases where the common law hath made no provision.

The name is taken from the words of the writ, which charge the party summoned to appear at the day and place assigned *sub pœna centum librarum*, on the penalty of a hundred pounds.

There is also a *sub pœna ad testificandum*, for summoning of witnesses in other courts, as well as chancery.

EXECUTOR, a person nominated by the testator to take care to see his will and testament executed or performed; and his effects disposed of according to the tenor of the will.

An executor is either universal, as having the charge and disposal of the whole; or only particular, entrusted with some particular branch thereof.

MILITARY AND NAVAL AFFAIRS.

THE ARMY.

THIS state includes the *soldiery*, or persons appointed for the defence of the realm. In a land of liberty it is dangerous to make a distinct order of the profession of arms. In absolute monarchies it is necessary for the safety of the

prince, and arises from the main principle of their constitution, which is that of governing by fear. In free states no man should take up arms but with a view to defend his country and its law. It was not till the reign of Henry VII. that the kings of England had a guard about their persons. The practice of keeping standing armies was first introduced by Charles VII. in France, 1445, and has since prevailed over Europe: and for the preservation of the balance of power in Europe, it was thought proper amongst us to maintain, even in time of peace, a standing body of troops, under the command of the crown; but they are considered, *ipso facto*, disbanded every year, unless continued by parliament.

Military discipline is the training of the soldiers, and the due enforcement of the laws and regulations instituted by authority. This discipline is the soul of all armies; and unless it be established with prudence, and supported with resolution, they would be little better than a rabble, and more dangerous to a state than even its enemies. The event of a battle depends much less at present on the personal strength and prowess of individuals than it did in the days of our forefathers. Discipline improves the courage men have derived from nature, and by inspiring them with a confidence in themselves and in each other, excites an artificial courage where the natural one is deficient. By the force of discipline men are kept in order and obedience to command, in opposition to the strongest impulse of their passions. When troops are said to be routed, nothing more is meant than that they are put into confusion, or that *order* and *subordination* are fled. The best disciplined troops are least likely to be conquered. It has been a general remark, that those regiments that have made the best figure on the parade, have, when taken upon service, distinguished themselves the most against the enemy: and those officers who have in maturer years turned out the most able generals, have, when young in the service, been most remarkable for their attention to military discipline.

The appointment of officers, and regular gradation or chain of authority, are necessary steps towards the establishment of this discipline and subordination. One principle is, that there must be *one supreme and sole in command*. The officers by which an army is commanded are, the *captain-general*, or commander in chief (field-marshal) and the other general and staff officers. A lieutenant, or even a major-general has often in our service the appointment of

commander in chief. A proper number of *general officers* are appointed according to the strength of the army. For this proportion no certain rules are established. When an army is considerable the following is considered as an adequate staff, exclusive of the commander in chief: a general for the horse and one for the foot, or a general for each wing of the army; a major-general for every two brigades; and about half that number of lieutenant-generals. Notwithstanding the distinct appellation of *general*, *lieutenant-general*, and *brigadier-general*, their duties are much the same. Those terms serve little purpose but to denote the successive gradations of rank.

At a siege a general officer is appointed to the command of each attack. On the day of march each column of the army has its own general officer to lead and command it. Besides the general officers and their aid-de-camps, there are other officers upon the staff, who are properly called staff officers of the army. Of these the principal are the adjutant and quarter-master-general.

General officers, therefore, are those who do not only command over a single company or regiment, but whose office and authority extends over a body of several regiments of horse and foot.

THE NAVY.

The term navy is applied in general to the fleet or shipping of a prince or state. Fleet implies a number of vessels going in company, whether on a design of war or commerce. Ship is a general name for all great vessels with sails, fit for navigating the sea, excepting galleys, which go with oars and smack sails. The command of a fleet is generally given to an admiral. A ship of war is usually commanded by a captain, lieutenants, &c. The invention of ships is very ancient, but the time uncertain. Some look on Noah as the first ship-builder. Ships are usually divided into three classes—ships of war, merchants' ships, and an intermediate kind, half war, half merchant; being such as, though built for merchandise, yet take commissions for war. Ships of war are again divided into several orders, called rates, of which the following are the chief:

A *man of war*, first-rate, has its gun deck from 159 to 174 feet in length; and from 44 to 56 feet broad; contains from 1313 to 1882 tons; has from 760 to 800 men; and carries from 96 to 110 guns.

A *frigate* is a two-decked ship, of the third, fourth, and fifth rate. Third rates have their gun-deck from 153 to 165

feet long, and from 37 to 40 broad; they contain from 871 to 1262 tons; carry from 389 to 476 men, and from 36 to 44 guns.

The other rates are proportionably less. The sixth rates have their gun-decks from 87 to 95 feet long, and from 22 to 25 feet broad; they contain from 152 to 256 tons; carry from 50 to 110 men, and from 16 to 24 guns.

New built ships are much larger and better than the old ones of the same rate; whence in the double numbers above, the larger express the proportions of the new built ships; the less, those of the old ones.

Sloops, or shallops, are tenders on the men of war, about 60 tons, and carry about thirty men. They are light small vessels, with only a small mainmast, foremast, and lug-sails to hale up and let down on occasion. They are commonly good sailers.

Fire-ships are filled with artificial fire-works, and sent in amongst the enemy's ships.

Bomb vessels have sometimes three masts, and square sails, but also often ketch fashion, with one mast and mizen.

Bomb ketch, is for the use of mortars at sea; it is a small vessel strengthened with large beams.

Galley is a low built vessel, going with oars and sails, chiefly used by the states bordering on the Mediterranean. Galleys have usually 25 or 30 benches of oars on each side, and four or five galley-slaves to each bench. The galley carries a large gun, two bastard pieces, and two small pieces. It is usually from 20 to 22 fathoms long, three broad, and one deep, and has two masts.

HUSBANDRY.

Husbandry, or, as it is often called, agriculture, is indisputably the most ancient of all the arts. Its history is coeval with the history of man; for no sooner was the great work of creation finished, than Adam was placed "in the garden of Eden, to dress it and to keep it." Gen. ii. 15. We read also that "Cain," the eldest son of Adam, "was a tiller of the ground." Gen. iv. 2. This art was also carried to a great extent in the antediluvian world. After the dispersion of mankind, A. C. 3247, agriculture, in common with the other arts then known, seems to have been attended to chiefly in the east, and especially by the Chaldeans, who cultivated their lands with great assiduity and skill; and their labours

were generally rewarded with abundant harvests. The Egyptians, whose country is annually fertilized by the overflowing of the Nile, were fond of agriculture ; they raised every year great quantities of wheat, barley, and other grain necessary for food. The Israelites, shortly after their settlement in Palestine, A. C. 1450, began to cultivate the soil ; and they were surpassed in this respect by their descendants, who considered the employment as highly honourable. The Greeks, originally a barbarous people, subsisting on roots, acorns, and wild berries, received a knowledge of the useful arts from their neighbours the Phenicians and the Egyptians, among the rest that of agriculture. The Romans also esteemed agriculture as an art highly honourable, and necessary to the public welfare. It is probable that the art was brought to Britain by some of the colonies which emigrated from Gaul about 150 years before Christ, and settled in the southern parts of this island, where they continued to pursue their usual employment of husbandry ; but it made but little progress till towards the sixteenth century. At this period, and even earlier, several good agriculturists flourished in England ; among these may be mentioned Gabriel Plattes, who, from the time of Elizabeth to that of Cromwell, continued to render essential services to the art, both practically and by his writings. In 1733, Jethro Tull invented the drill-plough, the use of which he explained in a work, entitled, *An Essay on Horse-hoeing Husbandry*. He is justly celebrated as the first Englishman, perhaps the first writer either ancient or modern, who attempted, with any tolerable degree of success, to reduce agriculture to certain and uniform principles. In the early part of the last century a spirit of improvement in husbandry began visibly to manifest itself, which has continued rapidly to increase to the present day. Various complicated machines have been invented, which have a tendency to diminish labour, and to bring the several operations of sowing, reaping, haymaking, &c. to a degree of perfection hitherto unknown. Above all, the improvements in Chemistry, and its increased use in the preparation of manures, may be considered as leaving little to be yet learned in this interesting department of the arts.

PLOUGHING, SOWING, &c.

Wheat, as is well known, is usually sown in fallow land. The fallowing may commence at any time between the middle of April and the middle of May, and it should be when the ground is in the best state, so as readily to fall to pieces

when acted upon by the plough. When ploughed too wet it rises as we say *whole-fur*, as when pasture land is ploughed ; but if too dry, it rises in large lumps, which subsequent ploughings will seldom reduce, and requires double force to plough it. The first course of fallow must, it is true, yield to the barley sowing ; but as this seldom extends beyond the first week in May, the fallow will easily be attained by the middle of the month, unless the season prove very unfavourable. The high ridges, in which clay soil is necessarily laid, should be cleaved by the first ploughing, beginning at the furrow, and ending at the crown, letting the plough descend as deep as the soil will admit : this operation should be immediately followed by water furrowing, and, if well performed, it will bring up the annual weeds in abundance. The great brake may be employed about the first week in June ; this, besides reducing and pulverizing the soil, will encourage a second crop of annual weeds, and bring up to the surface the roots of such as have been moved by the plough. About the middle of July, when the weeds have had sufficient time to spring, a cross-ploughing must take place, and the ground must be again water-furrowed. About the second week in August give the ground another braking, which will destroy the annuals that have sprung since the last ploughing. Thus having received two harrowings, and two brakings, the ground is prepared for manure, which ought to be laid on about the beginning of September, and incorporated with the soil by a repeated harrowing, and a gathering furrow. As soon as possible after this is done, the seed should be sown. In ploughing on clay, it is of great importance to prevent poaching, whence the hinting furrows ought to be done with two horses in a line ; and when four ploughs are worked in the same field, one of them should be employed in finishing the hinting furrows. The only chance to obtain a crop of wheat on a sandy soil is to sow it after red clover, the roots of which bind and consolidate the soil. Rye will succeed better than wheat on a sandy soil, and like wheat is generally sown after a summer fallow. In all the above cases, the wheat should be sown as early as possible in October ; if sown much earlier, it comes too forward, and is damaged by the spring frosts ; and if much later, it has not time to root, and the frost throws it out of the ground.

One of the greatest improvements in husbandry, that has taken place during the last century, is the setting or dibbling wheat. It has been generally observed, that although the set crops appear very thin during the autumn and winter,

the plants side-shoot and spread prodigiously in the spring. The ears are indisputably larger, without any dwarfish or small corn ; the grain is of a larger bulk, and specifically heavier per bushel than when sown. This method succeeds best after clover stubble, or on lands where trefoil and grass seed were sown the spring before the next preceding. The greater part of the wheat in this country is sown upon fallowed land. After a crop of turnips fed on the land, or clover cut for hay or soiling, it is usually sown with one ploughing only ; but upon heavier lands, or after grass of two or more years, two or three ploughings, or a rag fallow, will be necessary. The most general method of sowing wheat is the broad-cast ; drilling is however extensively practised in some places, especially when sown in spring, on lands much infested with the seeds of annual weeds. A third method of sowing, in which the drill machine is dispensed with, although some of its purposes are answered, is that usually called ribbing, which is merely sowing in the usual broad-cast manner, and the seed falling mostly in the intervals between the ribs, occasions the crop to grow in straight parallel rows ; the ribs being afterwards levelled by cross harrowing. As far as it regards the free admission of sun and air, this method has all the advantages of drilling ; but it is less proper where the use of the hoe is required. Poor land always requires more seed than rich, and any land requires more for the winter or spring sowing than for the autumn. Winter wheat sown in spring requires a liberal allowance of seed ; but it is not possible in any case to say with exactness how much will be necessary ; the quantity varies from two to four bushels per acre. From the nature of a broad-cast crop it is plain that the after culture must for the most part be confined to harrowing, rolling, and hand hoeing. One or two courses of harrowing will penetrate the crust formed on tenacious soils, and, like hand hoeing, bring the fresh mould up round the stems of the young plants. On dry porous soils rolling in spring should never be omitted, and on rough soils the foller is more beneficial in pulverizing the stiff heavy clods than the harrow. These operations are necessary to a certain extent in all cases ; but they are more particularly so where grass seeds are sown on spring or winter-sown wheat. Hand hoeing, by which thistles and other tall weeds are cut down, and annual weeds destroyed, should by no means be neglected, and to facilitate this desirable object the methods of drilling and ribbing are to be recommended.

Rye is sometimes sown round the edges of these corn crops

which are situate near the farm house, as a protection from poultry, which do not eat rye, and rarely pass through it. This grain will grow on soils which will scarcely bear any other. Besides the winter and spring kinds, it is further distinguished into black and white; the winter rye is the best, and it is frequently cultivated as a green crop, to be eaten in spring, when the turnips are over. The grain is sometimes prepared and made into bread, either by itself, or mixed with wheat flour: the straw is of no value for fodder, as the cattle do not eat it; but for thatching it is preferred to any other.

A rather light, mellow, and finely pulverized soil, is the most proper for barley, which is by no means a hardy plant. In some parts of England it is cultivated largely as a rotation crop; it is most commonly sown after turnips, sometimes after beans or pease, and when the weather has been unfavourable at the proper season, it has sometimes been sown even after a bare fallow. To whatever crop barley succeeds, the soil should be reduced to a considerable degree of fineness: and for this purpose, not only the plough, but the harrow and roller will be necessary. Barley is known to be less valuable, in proportion to the inequality in ripening; and that barley which comes up speedily in a dusky soil must gain a great advantage over seed weeds. Therefore, first take out about one-third of the contents of the sacks of seed barley or bear, to allow for the swelling of the grain. Lay the sacks with the grain to steep in clean water; let it be covered with it for at least 24 hours. When the ground is tolerably dry, and no likelihood of rain for 10 days, it is better to lie 36 hours. Sow the grain wet from steeping, without any addition of powdered quicklime, which, though often recommended in print, can only poison the seed, suck up part of its useful moisture, and burn the hands of the sower. The seed will scatter well, as clean water has no tenacity; only the sower must put in a fourth or a third more seed in bulk than usual of dry grain. The grain is swelled in that proportion; harrow it in as quickly as possible after it is sown; and though not necessary, give it the benefit of fresh furrow, if convenient. You may expect it up in a fortnight at farthest.

Very little preparation is necessary for oats, which will grow on almost every soil. Oats may follow any crop, but they usually succeed clover, where a course of alternate white and green crops is strictly observed, and are mostly the first crop sown on land that has been several years in

grass. The culture of oats is extremely simple ; other plants mostly require good and well wrought ground, but this kind will grow on the worst soil, and succeed best when the ground is not too finely pulverized. To prepare clay soils for oats, winter ploughing is necessary. The clay should not be ploughed wet, because the water will bind and harden it ; but it is less hurtful to plough wet clay before winter than after ; because, in the former case, the bad effects are often corrected by succeeding frosts. The seed is sown broad-cast on new-ploughed land as early in the month of March as possible, or as soon as the ground is tolerably dry. Some allow March and April for the sowing ; but others confine it to the former month, adding, that if it continues wet all the month of March, it is too late to venture the seed after. It is much better to summer fallow, and to sow wheat in the autumn. But the preferable method, especially in clay soils, is to turn over the field after harvest and to lay it open to the influence of frost and air, which lessen the tenacity of clay, and reduce it to a free mould. The surface soil by this means is finely mellowed for reception of the seed : and it would be a pity to bury it by a second ploughing before sowing. In general the bulk of clay soils are rich ; and skilful ploughing without dung, will probably give a better crop than unskilful ploughing with dung. The management of a loamy soil differs but little from the above, except that it should be ploughed crown and furrow, alternately. Where both clay and loam occur on the same farm, the former should, after harvest, be ploughed first ; and, if both cannot be effected that season, very little injury will be incurred by letting the loam be delayed till the ensuing spring.

There are two kinds of pease ; the white, which is principally cultivated in gardens ; and the grey, which belongs more particularly to the farm. The grey kind is divided into two species, namely, hot seed, and cold seed ; the former ripens quick, and the latter more slowly. Land intended for cold seed should be ploughed in October or November ; and in February, as soon as the ground is dry, the seed ought to be sown on the winter furrow. A field intended for hot seed ought to be ploughed in March or April, immediately before sowing ; but if infested with weeds, it ought to be also ploughed in October and November. Pease laid a foot below the surface will vegetate ; but the most approved depth is six inches in light soil, and four inches in clay soil ; for which reason they ought to be sown under furrow when the ploughing is delayed till spring. Of

all grain, beans excepted, they are the least in danger of being buried: they differ from beans, in loving a dry soil, and a dry season.

The most suitable soil for beans is a moist deep clay, or strong loam; they may indeed be raised on any heavy land, but turnip soils are by no means proper for this plant. Beans are sown three ways, namely, by the old broad-cast method, dibbling, and drilling. Respecting the broad-cast method, it is to be observed, that as this grain is early sown, the ground intended for it should be ploughed before winter, to give access to the frost and air; beneficial in all soils, and necessary in a clay soil. As soon as the ground is dry, sow without delay; but if rain happen in the interim, it will be necessary to defer the sowing until the return of dry weather. Coarse clay, ploughed before winter, seldom fails to cake. Upon that account a second ploughing is necessary before sowing: which ought to be performed with an ebb furrow, in order to keep the frost mould as near the surface as possible. To cover the seed with the plough is, with regard to this as well as other grain, expressed by the phrase *to sow under furrow*. The clods raised in this ploughing are a sort of shelter to the young plants in the chilly spring months. The foregoing method will answer for loam; but as for a sandy or gravelly soil, it is altogether improper for beans.

As beans thrive best in a moist soil, and have no end of growing in a moist season, they cover the ground totally when sown broad-cast, keep in the dew, and exclude the sun and air. The plants grow to a great height, but carry little seed. Whether drilling or dibbling be adopted, the rows ought always to be sufficiently wide apart to admit the horse-hoe, or about 27 inches: but where the hand-hoe only is proposed to be used, 18 inches, or sometimes only nine, are thought sufficient. The land should be ploughed with a deep furrow after harvest, or in the winter; and as two spring ploughings are highly advantageous, the winter furrow may be given in the direction of the former ridges, which will occasion the land to be sooner dry in spring than it would after a cross ploughing. As early in spring as the ground is sufficiently dry, let the second ploughing be given across the ridges: the third furrow either forms the drills, or receives the seed. When beans succeed wheat, dung is frequently laid on the land; by some it is spread on the stubble before the winter ploughing, but others lay it in drills immediately before the seeds are sown, which seems to be the method now most

generally adopted. The time of sowing is between the middle of January and the end of March; and the quantity of seed differs, according to situation and circumstances; in the southern parts of this island, two, or two and a half bushels per acre will be sufficient, even when the rows are close; but in the north, seldom less than four bushels are required when the rows are 27 inches distant; and in all cases an additional bushel per acre will be necessary for broad-casting. It is usual to mix with the beans a small quantity of pease, and, we are informed, that both the quantity of straw, and its value as fodder, are improved by the mixture; besides the pea straw is convenient for making bands, to bind the bean sheaves in harvest.

REAPING.

Both wheat and barley are reaped by the sickle, hook, or reaping machine. The slow and tedious operation of reaping with the sickle or hook seems to have universally prevailed in this country, untill within these few years; but latterly, the custom of reaping wheat before it is full ripe has in many places occasioned the sickle to be laid aside, and the hook to be solely employed, not in the usual way of reaping, but in fagging or chopping the corn down, which is a much more expeditious process than reaping; the cut is likewise made closer to the ground, and there is no danger of the corn being shaken out of the ear by the stroke, as was formerly the case when the wheat stood till it was dead ripe. Reaping machines have also been invented, by which a great saving of labour is effected. When cut, the wheat is bound up in sheaves; these are now made much less than they were formerly, when two lengths of straw were knotted together for the band; they are now usually made small enough to be bound by one length. Twelve sheaves, and sometimes fourteen, constitute a shock; these, when sufficiently dried by the air and sun, are carried into the barn or stack-yard, where they are deposited for threshing. The removal of the corn from the field was formerly attended with considerable loss; for the corn being dead ripe before it was cut, many of the grains were shook out of the ears and lost; but by the present practice of getting the corn in before it is thoroughly dry, this inconvenience is in a great measure remedied. As corn is supposed to keep better in stacks than in the barn, they are usually preferred to housing it, especially in the most noted corn counties; but in order

to prevent the access of damp or vermin, the stacks must be built on a substantial framing of timber, supported by pillars of stone or brick. They should be neatly thatched; and if the harvest prove wet, it will be necessary, in order to prevent heating, to make one or more funnels or bosses through the stack; of these the largest should pass perpendicularly through the middle, and the smaller ones should communicate with it in a lateral direction. Oats are most commonly mown: they are thrashed either by the flail or machine, and, in some parts of Yorkshire, this operation is performed on the bare ground, in the open air. The straw is frequently given to horses and cattle as a substitute for hay, and is more valuable on a farm than that of any other crop. Beans are sometimes mown, and sometimes pulled up by the roots; but the best method of getting them is by the reaping machine, and they are to be cut as near the ground as possible, for the sake of the straw, which is valuable for fodder. When sufficiently dry they are bound in sheaves, and set up in shocks like wheat; but before this takes place, they may be removed off the ground to dry, if it should be immediately wanted for a crop of wheat, which is frequently the case. Beans are set up in circular or oblong stacks, with one or more funnels, to prevent mildew and heating. They are afterwards threshed and winnowed like other grain, by machines adapted to the purpose.

HAYMAKING.

In this operation the most important consideration is the period at which the grass should be cut, and the weather most suitable for it. Many farmers in the north allow their hay not only to attain its ultimate growth, but even to make some progress towards decay, before it is cut: to obtain a bulky crop being their chief object, every other consideration is disregarded. Instead of cutting the crop during dry weather, and when it is free from every other but its own natural moisture, it is very often cut in a wet state, and on that account must remain in the swath a considerable time before it is fit for being put into cocks; during which, it requires to be frequently turned and exposed to the sun and atmosphere, for the purpose of drying it: in that way a considerable proportion of its natural juices is dissipated; and, by the time it is dry enough for putting into the stack, it has lost its flavour, and a great part of its most valuable properties. But it has been proved by experience, that the greatest perfection of the herbage is met with, either immediately

before it comes into flower, or as soon as the first flowers blow. At that period, it is in no shape exhausted, either by blowing a multitude of flowers, or forming seeds, and contains all the useful qualities of which its nature is capable. After that period, it daily diminishes in value, becomes tough, sapsy, and unpalatable, and is not chewed without considerable difficulty. It is therefore contended, that grass of all kinds should certainly be cut at the period mentioned, and, if possible, during dry weather.

The following is the method adopted by the Middlesex farmers, who, supplying the metropolis, are supposed to be good judges.

First day. All the grass mown before nine o'clock in the morning, is tedded (or spread) and great care taken to shake it out of every lump, and to strew it evenly over all the ground. Soon afterwards it is turned, with the same degree of care and attention; and if, from the number of hands, they are able to turn the whole again, they do so, or at least as much of it as they can, till twelve or one o'clock, at which time they dine. The first thing to be done after dinner, is to rake it into what are called single windrows; and the last operation of this day is to put it into grass-cocks.

Second day. The business of this day commences with tedding all the grass that was mown the first day after nine o'clock, and all that was mown this day before nine o'clock. Next, the grass-cocks are to be well shaken out into staddles (or separate plats) of five or six yards diameter. If the crop should be so thin and light as to leave the spaces between these staddles rather large, such spaces must be immediately raked clean, and the rakings mixed with the other hay, in order to its all drying of an uniform colour. The next business is to turn the staddles, and after that to turn the grass that was tedded in the first part of the morning, once or twice, in the manner described for the first day. This should all be done before twelve or one o'clock, so that the whole may lie to dry while the work-people are at dinner. After dinner, the first thing to be done is, to rake the staddles into double windrows; next, to rake the grass into single windrows; then the double windrows are put into bastard cocks; and, lastly, the single windrows are put into grass-cocks. This completes the work of the second day.

Third day. The grass mown and used on the second day, and also that mown on the first part of this day, is first to be tedded in the morning; and then the grass-cocks are to be spread into staddles, and the

bastard-cocks into staddles of less extent. These lesser staddles, though last spread, are first turned, then those which were in grass-cocks; and next the grass is turned once or twice before twelve or one o'clock, when the people go to dinner as usual. If the weather has proved sunny and fine, the hay which was last night in bastard-cocks, will this afternoon be in a proper state to be carried; but if the weather should, on the contrary, have been cool and cloudy, no part of it will probably be fit to carry. In that case, the first thing set about after dinner, is to rake that which was in grass-cocks last night into double windrows, then the grass which was this morning spread from the staddles, into single windrows. After this the hay, which was last night in bastard-cocks, is made up into full-sized cocks, and care taken to rake the hay up clean, and also to put the rakings upon the top of each cock. Next, the double windrows are put into bastard cocks, and the single windrows into grass-cocks, as on the preceding days.

Fourth day. On this day the great cocks just mentioned, are usually carried before dinner. The other operations of the day are such, and in the same order, as before described, and are continued daily until the hay-harvest is completed.

To prevent the fatal effects from the firing of hay, great care should be taken that it be thoroughly made; and that every lump of grass be intimately broken and divided, and have an equal participation of the sun and air. This operation should not be hurried, either with a view to lessen the expense in making, or from an apprehension that rain may fall before the business can be finished; or from a presumption that the hay will weigh heavier in the tufts, if the whole has been got together before it be fully made. In a wet season it seems the more eligible method to divide it into small parcels, as twenty loads in a stack, there being less danger of firing these small stacks, than when the hay is laid into those of larger dimensions.

GARDENING.

January. Frost is to be expected now, and nothing is so dangerous as tender flower roots and their shoots for spring. Cover the beds to guard them: lay on pease-straw where they are laid down, and where the shoot appears, place hoops with mats and cloths upon them. Cover the beds and

boxes of seedling flowers, and take off the ~~distance~~ when the weather is mild.

In the kitchen garden throw up some new dung in a heap to heat, that it may be ready to make hot beds both for the early cucumbers and melons in this part of the ground, and for raising seeds of annuals in the flower garden. Dig up the ground which is to be sown with the spring crops, that it may lay and mellow.

Fruit trees, whether in orchards or espaliers, or against walls, demand the same general management. Cut out dead wood and irregular branches, clean the stumps and boughs from moss with a hollow iron; and repair espaliers, fastening the stakes and poles with nails and wire, and tying the shoots down with twigs of osier.

February. Make hot-beds for annual flowers with the dung laid up for that purpose, and sow them upon a good thickness of mould, laid regularly over the dung.

Dig and level beds for sowing radishes and onions, carrots and parsnips; and Dutch lettuce, leeks, and spinnage, should also be sown now: also beets, celery, sorrel, and marigolds, with any other of the hardy kinds. Make up the hot-beds for early cucumbers, and sow cauliflower seeds, and some others. Plant beans and sow pease; the best way in these useful things is to sow a new crop every fortnight, and if one succeeds and another fails, as will often be the case, there may still be a constant supply, at the due season, for the table.

Most kinds of trees may now be pruned, though it is better to do it to the generality in autumn: whatever has been omitted at that season in this article must be done now; the hardest kinds being pruned first, and such as are more tender at the latter end of the month, when there will be little danger of their suffering from the frost in the wounded part.

March. Watch the beds of tender flowers, and throw mats over them, supported by hoops, in hard weather.

Sow in the beds of the kitchen garden some carrots, and also the large pease, rouncevals, and grey. In better ground sow cabbages and savoys, also carrots and parsnips for a second crop, and towards the end of the month put in a large parcel of beans and pease. Sow Cos and imperial lettuce, and transplant the finer kinds. Sow parsley, and plant mint.

The grafts which were cut off early, and lain in the ground to be ready for use, are now to be brought into service; those of the earliest kinds are to be used first, and the apple last of all.

April. As this month is the opening of spring, rake and clean all parts neatly. Turf should now be laid, and edgings of the borders put in order. Sow French honeysuckles, wall-flowers, and other hardy plants, upon the natural ground; and the tender kinds on hot-beds. Transplant those sown last month into the second hot-bed, and sow carnations and pinks on the natural ground or open borders.

Plant a large crop of French beans; and choose for them a dry warm border. Plant cuttings of sage and other aromatic plants. Sow marrowfat pease, and plant some beans for a late crop. Sow thyme, sweet majoram, and savory. Pick out celery and plants of every kind when fit. Prepare dung for making ridges to receive the cucumber and melon plants, designed for bell or hand glasses. Sow young salading once in ten days; and sow some Cos and Silesia lettuces.

Look to the fruit trees against the walls and espaliers. Take off all foreright shoots, and train such as rise kindly. Thin apricots upon the trees, for there are usually many more than can ripen; and the sooner this is done, the better the others succeed. Water new planted trees. Dig up the earth in the borders near fruit trees. Never plant any large kind of flowers or kitchen things upon them; and it is better if nothing be sown or planted on these borders, as they all starve the fruit.

May. Pot the tender annuals, as balsams, amaranths, and the like, and set them in a hot-bed frame till summer is more advanced for planting them in the open ground.

Water once in two days the pease, beans, and other large growing plants.— Destroy the weeds in all parts of the ground, and dig up the earth between the rows and about the stems of all larger kinds: and earth up the potatoes, pease, beans, cabbage, celery, &c.

If any fresh shoots have sprouted upon the fruit trees in espaliers, or against walls, nip them off, and train the proper ones to the walls or poles, at due distances, and in a regular manner.

June. Choose the evening of a mild showery day, and plant out into the open ground the tender annuals hitherto kept in pots in the hot-bed frame; they must be carefully loosened from the sides of the pot, and shaken out with all the mould about them: a large hole must be opened for each; they must be placed upright in it, and, when settled in the ground by a gentle watering, must be tied up to sticks.

Transplant the cauliflower plants sown in February. Give

them a rich bed and frequent waterings. Plant out thyme and other savoury plants sown before, and in the same manner shade and water them. Plant also cucumbers and melons, capsicums, leeks, and celery.

Repeat the taking off foreright shoots upon wall and espalier trees, which we directed last month. Train proper branches to their situations, where they are wanted.

July. Gather the seeds of flowers you design to propagate, and lay them upon a shelf in an airy room in the pods. When they are well hardened, tie them up in paper bags, and do not take them out of the pods till they are to be sown. Sow lupins, larkspurs, and the like, on dry warm borders, to stand the winter, and flower early next year.

Sow a crop of French beans to come in late, when they will be very acceptable; as also brocoli and endive. Clear all the ground from weeds. Dig between the rows of beans and pease; hoe the ground also about the artichokes among the cabbage kind.

Inoculate peaches and nectarines. Take off all foreright shoots in the espalier and wall-fruit trees. Hang phials of honey and water upon the fruit trees, and look carefully for snails. Keep the borders where the fruit trees stand clear from weeds, and stir the earth about them. This will greatly assist the fruit in ripening.

August. Dig up a mellow border, and draw lines of five inches distance lengthwise and across; in the centre of these squares plant the seedling polyanthuses, one in each square. In the same manner plant out the seedling auriculas. Shade them till they have taken root, and water them once in twenty-four hours.

Sow some spinnage upon a rich border, and on such another sow onions. Those two crops will live through the winter unless very severe, and be valuable in the spring. The second week in August sow cabbage seed of the early kinds; and a week after that sow some cauliflower seed. This will afford the plants that are to be nursed up under bed glasses in the winter.

Watch the fruit on your wall trees, and keep off devourers, of which there are numberless kinds now swarming about them. Keep off the birds, pick up snails, and hang bottles of sweet water for flies and wasps. Propagate trees and shrubs, by laying young shoots in fine rich earth, and keep the ground clean about them.

September. A new kind of work begins this month; which is, preparing for the next season. Tear up the annuals

that have done flowering, and cut down such perennials as are past their beauty; bring in other perennials from the nursery beds, and plant them with care at regular distances. Slip polyantheses, and place them in rich shady borders. Sow the seeds of flowers-de-luces and crown-imperial, as also of auriculas and polyantheses, according to the method we delivered before.

Sow lettuces of various kinds, Silesia, Cos, and Dutch; and when they come up shelter them carefully. Plant some beans, and sow some pease, on warm and well-sheltered borders, to stand out the winter; also Brussels sprouts, choumilan, and celery; and lettuces on dry warm ground.

The fruit must now be gathered with care every day, and the best time is an hour after sunrise. Then it should be laid in a cool place till used. Such as is gathered in the middle of the day is always flabby. Transplant gooseberries and currants, and plant strawberries and raspberries; they will be rooted before winter, and flourish the succeeding season.

October. Let all bulbous roots for spring flowering be put into the ground. Narcissus, maragon, tulips, and such ranunculuses and anemonies as were not planted sooner. Transplant columbines, monkshood, and all kind of fibrous rooted perennials. Place the auriculas and carnations that are in pots under shelter. Propagate, by layers of the young wood, roses, jessamines, bay, laurel, and laurustinus; by cuttings or slips, gooseberries, currants, honeysuckles, barberry, box, &c.

Plant out the cauliflower plants where they are to be sheltered; and it will be proper to plant two for each glass, where that method is used, for fear of one failing. Sow another crop of pease, and plant more beans; choose for these a dry spot, and well sheltered from the cold wind of winter. Transplant the lettuces sown last month, where they can be defended by a reed hedge or under walls. Transplant cabbage plants and coleworts, where they are to remain.

Prune the peach and nectarine trees, and the vines. This is a very useful practice, for it strengthens the buds for spring. Cut grapes for preserving, with a joint of the vine to each bunch. Gather fruits for winter keeping as they ripen. Transplant all garden trees for flowering; prune currant bushes, and preserve the stones of the fruit for sowing.

November. Throw together a good heap of pasture ground,

with the turf among it, to rot for mould on the borders. Transplant honeysuckles and spireas, with other hardy flowering shrubs.

Weed the crops of spinnage, and such other kinds as were sown late, for the wild growth will else smother and starve the crop. Dig up a border under a warm wall, and sow some carrots for spring : sow radishes in such another place, and see the ground be well and deep dug for both. Turn the mould that was trenched and laid up for fallowing : this destroys weeds, and prepares the soil to be enriched by the air.

Stake up all the trees planted for standards, or the winds will rock them at the bottom, and the frost will be let in and destroy them. Throw a good quantity of pease straw about them, and lay on it a good number of brickbats or pebbles, to keep it fast ; this will mellow the ground, and keep out the frost. Continue to prune wall-fruit trees, and prune at this time also the apple and pear kind. Pull off the late fruit of figs, as it would destroy and rot the branches.

December. Though the garden is no longer a decorated scene, yet it affords many things of promise which demand attention ; and which the industrious gardener will sedulously forward for the coming year. In order to this, guard against frost by every possible means. All vacant ground clear, dung, rough dig, or trench. Prepare and manage the materials for hotbeds ; and incorporate the composts well by turning them over. Draw the mats and cloths over the ranunculus and anemiony beds in severe weather, whether frost or cold rain ; but give them air in the middle of every tolerable day, and as soon as possible uncover them all day ; but draw on the mats against night.

Plant cabbages and savoy's for seed. Sow another crop of pease, and plant another parcel of beans, to take their chance for succeeding the others.

Prepare for planting trees where they will be wanted in spring, by digging the ground deep, and turning it well now in the places where they are to stand. Scatter over the borders, where the fruit trees are planted, some fresh mould, and some old dung, and in a mild day dig it with a strong three-pronged fork. Look over the orchard trees, and cut away superfluous and dead wood. Let the branches stand clear of one another, that the air may get between, and the fruit will be better flavoured. This is the management of old trees ; and new planted ones are to be preserved by covering the ground at their roots. Drain the wet from the orchard, as well as from the garden and nursery, &c.

MANAGEMENT OF BEES.

THE natural history of the bee is both curious and interesting: independently of the display it affords of the wisdom and goodness of the great Author of our being, in common with the rest of his works, this little insect reads to man some important lessons of industry and economy.

There are several species of the bee, but the most remarkable is that of the millifica; or domestic honey bee, of the formation, instinct, and management of which we shall briefly treat.

This species is furnished with downy hairs; has a dusky-coloured breast, and brownish belly; the tibiae of the hind legs are ciliated, and transversely streaked on the inside. Each foot terminates in two hooks, with their points opposite to each other; in the middle of these hooks there is a little thin appendix, which, when unfolded, enables the insects to fasten themselves to glass or the most polished bodies. This part they likewise employ for transmitting the small particles of crude wax which they find upon flowers to the cavity in their thigh. The queen and drones, who never collect wax in this manner, have no such cavity. This species is also furnished with a proboscis, or trunk, which serves to extract the honey from flowers; and has besides, a real mouth, situate in the fore part of the head, with which it is able to feed on the farina of flowers, from which afterwards is made wax. The belly is divided into six rings or joints; which sometimes shorten the body, by slipping the one over the other. In the inside of the belly there is a small bladder or reservoir, in which the honey is collected, after having passed through the proboscis and a narrow pipe which runs through the head and breast. This bladder, when full of honey, is about the size of a small pea.

The sting, which is situate at the extremity of the belly, is a very curious weapon; and, when examined by the microscope, appears of a surprising structure. It has a horny sheath, or scabbard, which includes two bearded darts. This sheath ends in a sharp point, near the extremity of which a slit opens, through which, at the time of stinging, the two bearded darts are protruded beyond the end of the sheath: one of them is a little longer than the other, and upon its

beard first; and the other instantly following, they penetrate alternately deeper and deeper, taking hold of the flesh with their beards or hooks, till the whole sting is buried in the flesh; and then a venomous juice is injected through the same sheath, from a little bag at the root of the sting. Hence the wound occasions an acute pain and swelling of the part, which sometimes continues several days.

We may consider a hive of bees as a well peopled city, in which are commonly found from 15,000 to 18,000 inhabitants. This city is in itself a monarchy; composed of a *queen*; of males, which are the *drones*; and of *working bees*, which have been supposed and called neuters. The combs, which are of pure wax, serve as their magazine of stores, and for the nursing places of their young offspring. There is between the combs a space sufficient for two bees to march abreast, without embarrassing each other; and in some parts it is more spacious. There are also holes, or narrow passes, which cross the combs transversely, and are intended to shorten the way when the bees pass from one comb to another.

The queen is easily distinguished from the other bees by the form of her body; she is longer and larger than they are, and her wings are much shorter than theirs in proportion to her body; for the wings of the other bees cover their whole body, whereas those of the queen hardly reach beyond her middle, or end at about the third ring of her belly. Her hinder parts are more taper than those of the other bees, terminating sharper. Her belly and legs are of a deep yellow, much resembling the purest gold. She is unwieldy in her flight, a reason for her seldom flying but when she leaves the parent hive to go and settle a colony. All the bees form her retinue, and, like dutiful subjects, repair to the place she chooses. She is armed with a vigorous sting. Less passionate however than her subjects, she only uses her sting when long provoked, or when in contest for imperial sway. Never more than one remains in a hive, and that is the conqueror.

A hive of bees cannot subsist without a queen, as she alone produces their numerous posterity; and on this account their fidelity and attachment to their sovereign are admirable.

The dissection of the queen bee shews evidently that she lays many thousand eggs. It is computed that the ovaria of a queen bee contains more than 5000 eggs at one time; and therefore it is not difficult to conceive that a queen bee

the branches there may be rubbed with rue, or alder leaves, or any other thing distasteful to them, to prevent their returning to it.

The hive employed on this occasion should be cleaned with the utmost care, and its inside be rubbed very hard with a coarse cloth, to get off the loose straws or other impurities, which might cause them a deal of time and labour to gnaw away. It may then be rubbed with fragrant herbs or flowers, the smell of which is agreeable to the bees; or with honey.

The hive should not be set immediately on the stool where it is to remain; but should be kept near the place at which the bees settled till the evening, lest some stragglers should be lost. It should be shaded either with boughs or with a cloth, that the too great heat of the sun may not annoy the bees.

We sometimes see a swarm of bees, after having left their hive, and even alighted upon a tree, return to their first abode. This never happens but when the young queen did not come forth with them for want of strength, or perhaps courage to trust her wings for the first time, or possibly from a consciousness of her not being impregnated.

When a swarm is too few in number for a hive, another may be added. The usual method of thus uniting swarms is very easy. Spread a cloth at night upon the ground close to the hive in which the two casts or swarms are to be united; lay a stick across this cloth; then fetch the hive with the new swarm, set it over the stick, give a smart stroke on the top of the hive, and all the bees will drop down upon the cloth in a cluster. This done, throw aside the empty hive, take the other from off the stool, and set this last over the bees, who will soon ascend into it, mix with those already there, and become one and the same family. Others, instead of striking the bees down upon the cloth, place with its bottom uppermost the hive in which the united swarms are to live, and strike the bees of the other hive down into it. The former of these hives is then restored to its natural situation, and the bees of both hives soon unite. If some bees still adhere to the other hive, they may be brushed off on the cloth, and they will soon join their brethren. Or one may take the following method, which gives less disturbance to the bees: Set with its mouth uppermost the hive into which the young swarm has been put, and set upon it the other hive. The bees in the lower hive, finding themselves in an inverted situation will soon ascend into the upper.

Though all writers acknowledge that one of the queens is constantly slain on these occasions, and generally a considerable number of the working bees, yet none of them, Columella excepted, has proposed the easy remedy of killing the queen of the latter cast or swarm before the union is made, a means by which the lives of the working bees may be preserved: this may be done either by intoxicating them and then picking her out, or by searching her out when the bees are beaten down upon the cloth; for this being done in the night to prevent the battle which might otherwise ensue, there will be no great difficulty in finding her.

A large swarm may weigh eight pounds, and so gradually less to one pound; consequently a very good one may weigh five or six pounds. All such as weigh less than four pounds should be strengthened by uniting to each of them a less numerous swarm. The size of the hive should be proportioned to the number of the bees; and as a general rule, it should be rather under than over sized, because bees require to be kept warmer than a large hive will admit of.

Many hives of bees, which are thought to die of cold in the winter, in truth die of famine; when a rainy summer has hindered the bees from laying in a sufficient store of provisions. The hives should therefore be carefully examined in the autumn, and should then weigh at least eighteen pounds.

The common practice is to feed them in the autumn, giving them as much honey as will bring the whole weight of the hive to near twenty pounds. To this end the honey is diluted with water, and then put into an empty comb, split reeds, or upon clean wool, which the bees will suck perfectly dry. But the dilution with water makes the honey apt to be candied, and honey in that state is prejudicial to bees.

The following directions, given in the "*Maison Rustique*," seem to be very judicious. Replenish the weak hives in September with such a portion of combs full of honey taken from other hives as shall be judged to be a sufficient supply for them. In order to do this turn up the weak hive, after taking the precaution of defending yourself with the smoke of rags, cut out the empty combs, and put the full ones in their place; where secure them with pieces of wood run across in such manner that they may not fall down when the hive is returned to its place. The bees will soon fix them more effectually. If this method be thought too

troublesome, set under the hive a few drops of honey mixed with water, with straws laid across it, and cover it with a paper pierced full of holes, through which the bees may suck the honey, without daubing themselves. This should be done in cloudy or rainy weather, when the bees stay long abroad; and the hive should be covered, to protect the bees from robbers, who might be allured to it by the smell of the honey.

Another circumstance which may render it very necessary to feed the bees is, when several days of bad weather ensue immediately after they have swarmed: for then, being destitute of every supply beyond what they carried with them, they may be in great danger of starving. In this case honey should be given them in proportion to the duration of the bad weather.

In this country it is usual, in seizing the stores of these little animals, to rob them also of their lives. The common method is, that when those which are doomed to slaughter have been marked out (which is generally done in September) a hole is dug near the hive, and a stick, at the end of which is a rag that has been dipped in melted brimstone, being stuck in that hole, the rag is set on fire, the hive is immediately set over it, and the earth is instantly thrown up all around, so that none of the smoke can escape. In a quarter of an hour all the bees are seemingly dead; and they will soon after be irrecoverably so by being buried in the earth that is returned back into the hole. By this it means it is that they are absolutely killed; for it has been found by experiment, that all the bees which have been affected only by the fume of the brimstone, recover again, excepting such as have been singed or hurt by the flame. Hence it is evident that fume of brimstone might be used for intoxicating the bees, with some few precautions. The heaviest and the lightest hives are alike treated in this manner: the former, because they yield the most profit, with an immediate return; and the latter, because they would not be able to survive the winter. Those hives which weigh from fifteen to twenty pounds are thought to be the fittest for keeping.

But the Rev. Mr. White, in his Natural History, informs us, that his fondness for these little animals soon put him upon endeavouring it possible to save them from *fire* and *brimstone*; for which purpose he gives, in the above work, ample directions for making the bee boxes of his invention; by which this important object is effected.

USEFUL MEMORANDUMS.

A **REAM** of paper, **20** quires.—A quire of paper, **24** sheets.

A bale of paper, **10** reams.

A roll of parchment, five dozen, or **60** skins.

A dicker of hides, **10** skins.—A last of hides, **12** dozen ; of leather, **20** dickers.

A load of timber, unhewed, **40** feet.

A chaldron of coals, **36** bushels.

A hogshead of wine, **63** gallons.—Ditto of beer, **54** gallons.—A barrel of beer, **36** gallons.—Ditto of ale, **32** gallons.

A gross, **144**, or **12** dozen.

A wey of cheese, **256** lb.

An acre of land, **160** square poles or perches.

A last of corn, or rape-seed, **10** quarters.

A quarter in England, **8** bushels ; in Scotland, **4** bolls.

A last of potashes, cod-fish, white-herrings, or meal, **12** barrels ; pitch and tar, **14** barrels.—Ditto of flax and feathers, **1700** lb. ; of gunpowder, **24** barrels, or **2400** lb. ; of wool, **12** sacks.

A tun of wine, **252** gallons ; oil of Greenland, **252** gallons ; and sweet oil of Genoa, **236** gallons.

A ton of iron, &c. **20** cwt. ; but of lead there is only **19** cwt. called a fodder or fother.

A tod of wool, **28** lb.—A pack of ditto, **364** lb.

A load of bricks, **500** ; and of plain tiles, **1000**.

A stone of glass, **5** lb. ; of fish, **8** lb. ; and of wool, iron, and shot, **14** lb. Horseman's weight is also reckoned at **14** lb. per stone ; but pepper, cinnamon, and alum, have but **13** lb.

A truss of hay, **56** lb. ; and a load of ditto, **39** trusses.

Note—New hay, in June and August, ought to be **60** lb. to the truss, as per statute of 2nd of William and Mary, **1693**.

Barrels of sundry Commodities.

Anchovies, 30 lb.	Raisins, 1 cwt.
A double barrel, 60 lb.	Oil, 31 gallons and a half.
Nuts or apples, 3 bushels.	Spanish tobacco, 2 cwt. to
Potash or barilla, 300 lb.	3 cwt.
White or black plates, 300.	Gunpowder, 1 cwt.
Candles, 10 dozen pounds.	Soap, 240 lb.
Salmon or eels, 42 gallons.	Butter, 224 lb.
Figs, 3 qrs. 14 lb. to $2\frac{1}{4}$ cwt.	Herrings, 32 gallons.

Articles in wholesale Trade, bought and sold by the Thousand.

Oranges and lemons.	Bricks.
Chair nails.	Clinkers, or Flanders tiles.
Tacks and tenter hooks.	Billets and leaves of horn
Pomegranates.	Barrel hoops.
Goose quills.	Squirrel skins.
Thimbles.	Slate and hilling stones.

Pins and small needles by the thousand dozen.

Articles bought and sold at Six Score to the Hundred.

Ells of canvass, and most	Barrel and pipe boards.
foreign linens.	Cod-fish, cole, ling, and New-
Hogshead staves.	foundland fish; stock-fish
Nails.	of all sorts.

MEDICINAL RECEIPTS.

Stomach Plaister for a Cough.

TAKE an ounce each, of bees' wax, Burgundy pitch, and resin; melt them together in a pipkin, and stir in three quarters of an ounce of common turpentine, and half an ounce of oil of mace. Spread it on a piece of sheep's leather, grate some nutmeg over, and apply it quite warm to the pit of the stomach.

Electuary for a Cough.

Take of aniseed, liquorice, and elecampane powders, each half an ounce; of diapente, a quarter of an ounce; jalap

powder, one dram ; mix them in a quarter of a pound of treacle or honey, and take a tea spoonful night and morning. This remedy has been found, by forty years' experience, particularly efficacious in a cough of long standing, but must not be used for one which arises from a recent cold.

Cure for a recent Cough and Cold.

Put a large teacup-ful of linsced, with a quarter of a pound of sun raisins, and two pennyworth of stick liquorice, into two quarts of soft water, and let it simmer over a slow fire till reduced to one quart ; add to it a quarter of a pound of powdered sugar-candy, a table spoonful of old rum, and a table spoonful of the best white wine vinegar or lemon juice. The rum and vinegar should be added as the decoction is taken ; for if they are put in at first, the whole soon becomes flat and less efficacious. The dose is half a pint, made warm, on going to bed ; and a little may be taken whenever the cough is troublesome. The worst cold is generally cured by this remedy in two or three days ; and, if taken in time, is considered infallible. It is a fine balsamic cordial for the lungs.

Oils for a Sprain.

Take of oil of John's wort, oil of swallows, oil of worms, oil of whelps, oil of camomile, and spirits of wine, each half an ounce ; mix them together, and apply them to the part affected, with a feather, by the fire-side, when going to bed ; keep it moist with the oil as fast as the fire dries it for half an hour, and in the most obstinate case, it will effect a cure in a few days.

- Cure for the Ague.

Take thirty grains of snake root ; forty of wormwood ; half an ounce of the best powdered Jesuits' bark ; and half a pint of red port wine. Put the whole into a bottle, and shake it well together. It should be taken in four equal quantities, the first thing in the morning, and the last thing at night, when the fit is quite over. The quantity should be made into eight parts for a child, and the bottle should always be well shaken before taking it.

This medicine should be continued some time after the ague and fever have left.

INDEX.

	PAGE		PAGE
AMUSEMENTS and re-		Astronomy	223
creations	729	The solar system	224
Arithmetic	63	Fixed Stars	228
Numeration	64	Eclipses	<i>ib.</i>
Addition	66	Tides	229
Subtraction	73		
Multiplication	76	Bees, management of	791
Division	82	Bills of parcels, forms of	135
Reduction	90	— exchange, forms of	136
Rule of Three Direct	95	— — — — — rules re-	
Rule of Three Inverse	100	specting	138
Rule of Five	101	Biography	503
Practice	106	Cardinal Wolsey	504
Interest	113	Shakespeare	529
Vulgar Fractions	125	Duke of Marlborough	534
Reduction of Vulgar		Col. Gardiner	552
Fractions	<i>ib.</i>	Dr. Johnson	574
Addition of Vulgar		Lord Nelson	582
Fractions	127	Book-keeping	131
Subtraction of Vulgar			
Fractions	<i>ib.</i>	Chess	754
Multiplication of Vul-		Christian dispensation, ex-	
gar Fractions	<i>ib.</i>	cellence of the	640
Division of Vulgar		— — — — — duties	711
Fractions	128	Christianity, principal doc-	
Decimal Fractions	<i>ib.</i>	trines of	671
Addition of Decimals	129	Fall of Man	674
Subtraction of Deci-		Atonement	677
mals	<i>ib.</i>	Divinity of Christ	679
Multiplication of Deci-		Conversion	685
mals	130	Influences of the Spirit	691
Division of Decimals	<i>ib.</i>	Justification	696
Reduction of Decimals	<i>ib.</i>	Providence	701
Mensuration	139	Resurrection of the	
Extraction of the		body	705
Square Root	149	Future state	709
Extraction of the Cube		Chronology	597
Root	150	Epochs and Eras	<i>ib.</i>
Arithmetic, explanation		Divisions of time	599
of the characters used		Chronological table	604
in	124	List of the Monarchs	
Articles, miscellaneous	761	of England	636
Artificer's work	141	Commercial affairs	761

INDEX.

	PAGE
Definitions, geometrical	139
——— geographical	153
Drawing	748
Earth, general description of the	154
England, history of	353
——— list of the mo- narchs of	636
——— the law of	769
English Grammar	17
Orthography	<i>ib.</i>
Etymology	18
Syntax	31
Prosody	36
Punctuation	37
Capitals	39
Parsing	40
Exercises in pars- ing	<i>ib.</i>
Fishing	746
Gardening	765
Gardiner, life of Colonel	552
Geography	153
General description of the earth	154
Europe	158
Lapland	<i>ib.</i>
Norway	159
Denmark	<i>ib.</i>
Sweden	160
Russia	<i>ib.</i>
Prussia	161
Batavia	<i>ib.</i>
Germany	162
Austrian Dominions	163
Turkey in Europe	<i>ib.</i>
France	164
Switzerland	165
Italy	<i>ib.</i>
Spain	167
Portugal	<i>ib.</i>
England	168
Wales	200
Scotland	201
Ireland	204
General summary	207

	PAGE
Geography— <i>continued.</i>	
Asia	208
Turkey in Asia	209
Russia in Asia	210
China	<i>ib.</i>
Birm an Empire	211
Hindoostan	212
Persia	213
Tartary	<i>ib.</i>
Arabia	214
Eastern Archipelago	<i>ib.</i>
Australasia	215
Polynesia	<i>ib.</i>
General summary	216
Africa	<i>ib.</i>
Abyssinia	217
Egypt	<i>ib.</i>
Barbary	<i>ib.</i>
Guinea	<i>ib.</i>
Caffraria	<i>ib.</i>
General summary	218
America	219
United States	<i>ib.</i>
West Indies	220
South America	221
General summary	222
Globes, use of the	229
Grammar, English	17
Haymaking	783
History	309
Sacred History	311
Ancient History	313
Egypt	<i>ib.</i>
Assyria	314
Persia	316
Greece	317
Rome	330
Modern History	345
Germany	<i>ib.</i>
France	347
Spain	349
Sweden, Denmark, and Norway	350
Poland	<i>ib.</i>
Prussia	<i>ib.</i>
Russia	351
Turkey	352
England	353

INDEX.

	PAGE		PAGE
Horsemanship	730	Natural philosophy— <i>continued</i> .	
Husbandry	775	Magnetism	269
Ploughing, Sowing,		Nelson, life of Lord	582
&c.	776	Ploughing, Sowing, &c.	776
Reaping	782	Promissory notes, forms of	136
Haymaking	783	Problems, geometrical	141
Ink, to make various sorts		— geographical	231
of	48	Reading and writing	45
Johnson, life of Dr.	574	• Instructions for	
Letter writing.	50	learning to write	46
—specimens of	52	To make a pen	47
Letters, superscriptions for	57	Reaping	782
Marlborough, life of the		Receipts, forms of	135
Duke of	534	— medicinal	801
Memorandums, useful	800	Religion	639
Military and naval affairs	820	Religious denominations	717
Music	753	Revelation, necessity of	642
Natural History	271	Sailing and rowing	743
Animal kingdom	272	Scriptures, genuineness and	
Vegetable kingdom	297	authenticity of the	645
Mineral kingdom	304	— inspiration of the	662
Natural philosophy	236	Shakespeare, life of	529
Matter	<i>ib.</i>	Skating	744
Motion	240	Swimming	741
The mechanical		Table, Chronological	604
powers	244	— of abbreviations now	
Hydrostatics	248	in common use	60
Hydraulics	250	Tables, interest	119
Pneumatics	251	— arithmetical	169
Acoustics	254	Wolsey, life of Cardinal	504
Optics	<i>ib.</i>		
Electricity	260		

DIRECTIONS TO THE BINDER,

For Placing the Plates.

	Page
Frontispiece <i>to face the Vignette.</i>	
Bridge of St. Maurice across the Rhone, Switzerland	165
Singular Rock at Dumbarton, Scotland	201
Signs of the Zodiac	223
Portrait of Shakspeare	529
—— Colonel Gardiner	552
—— Lord Nelson	582
Village Church, Yorkshire	752

